# PART ONE: A STRATEGY - THE ECONOMIC PLANNING COUNCIL'S PROPOSALS

## THE JOB TO BE DONE

1. The study upon which these proposals are based has been undertaken by the Research Group of the Yorkshire and Humberside Economic Planning Board. This team is drawn from the various Government Departments concerned. The Council would like to record their appreciation of the Group's hard work and enthusiasm.

2. The study provides a survey and assessment of the area's problems and potential. The results are summarised in chapter 6 which concludes with a discussion of the implications of the findings for the future of the area. The decision to be taken is to determine in broad terms how the area's problems should be tackled and what contribution it can make to the Region - indeed to the country as a whole.

3. Most of the Council's views are related to specific sectors within the area, and these are set out below for each sector. To begin with, here are the general impressions and recommendations.

4. The area is the home of a number of large undertakings in industry and commerce. It contains an important section of the textile industry, in particular a thriving carpet industry; a complex of engineering industries, with the manufacture of machine tools to the fore; and a large confectionery industry. It provides homes, jobs and services for a population of 196,000. The study brings out that in some respects parts of the area are as well equipped as many other areas of the region to accommodate growth of industry and population. It has, for instance, a fair level of provision of most services and a strong community life; both town and country have a strong character of their own; there are many opportunities for recreation and there could be more; and with the completion of the M.62 it will have a greatly improved position on the national trunk road network.

5. On the other hand, there is no escaping the conclusion that the difficulties of the area are severe. Much of the industrial structure is antiquated and although there is no shortage of jobs, the range is limited and their attractiveness in terms of earnings and working conditions is greatly below average. The various parts of the area have tended to remain self-contained units with relatively little travel-to-work from one to another. The quality of housing is low and the area suffers from serious disadvantages of climate, pollution and dilapidation. Its hilliness means a shortage of suitable land for development. In face of these difficulties it is not surprising that the area has lost population and continues to do so. Indeed, the net loss by migration has accelerated and it would be unrealistic to assume that it can be easily halted and reversed.

6. But the quality of life in the area matters more than sheer numbers and action should be directed to its improvement. Otherwise decline may well continue and the accompanying decay will adversely and indiscriminately affect the industry of the area and spread wider. The Council propose a programme of action which is in their view the minimum necessary to avoid this. Even with the most effective action which the Council can envisage, the area is likely for some years to come to continue losing population. But as the measures taken become effective, this trend should be reduced and the total population should stabilise at a level not too much below the present.

7. The main requirements are these:-

(a) Industry should be induced to invest more in buildings, plant and machinery and to press ahead with the introduction of new techniques, to provide an increased proportion of jobs with higher earnings and better working conditions.

(b) A high rate of clearance of old poor houses should be sustained and new housing should be of good quality.

(c) More land suitable for housing and industrial development should be made available if needed.

(d) The physical environment should be improved to make the area more attractive to live in.

8. The possibilities of industrial growth, re-equipment and (to a lesser extent) new techniques will be heavily dependent on Government policies. The Council are of the opinion that the study area, taken as a whole, like several other Pennine areas, merits consideration by the Committee under the chairmanship of Sir Joseph Hunt, although the characteristics vary as between the different sectors. The Council have taken steps to see that this Committee is made aware of the contents of this study, and they take this opportunity to indicate their general view that modifications of Government policies would be appropriate throughout the study area.

9. The Council think that a still more vigorous housing policy will have to be followed throughout the study area if it is to become reasonably competitive with other parts of the country as they are now, and still more as they will be in the future. The current building rate of about 1,000 houses a year, combined with the continued use of about half the present number of houses under £30 rateable value, would if maintained to 1981 provide accommodation for about 184,000. But the Council are not content with the standard that this would represent. They realise that the rate is influenced by public demand and this in turn reflects the extent to which the public will continue to accept the present standard of housing. But the Council point out that it is possible to have a public which is too ready to acquiesce; those who stay may well be content with slowly improving conditions, but many of the most active elements will leave the area because of the slowness of improvement. The Council note that differential assistance is available to local authorities for whom housing constitutes a serious burden, and that some authorities in the area already receive it. They invite the Minister of Housing and Local Government to consider whether this assistance is sufficiently well-directed and large enough to achieve the aims of high redevelopment programmes in the situation which the study discloses. A revision of the system of subsidies would involve new legislation, but the Council wish to emphasise that their proposals are long term.

10. Development will need land. The Council acknowledge that the green belt in the study area has been designed for the conurbation as a whole, and that it confers great benefits on the large populations (on both sides of the Pennines) by providing open areas and containing the urban settlements. While modifications of a green belt should not lightly be undertaken, the planning of land use - a matter for the local planning authorities - needs to be carried out within the framework of a strategy for the economic future of the whole area. Due weight must be given to the limited but specialised needs of industry for flat, level sites - particularly in the south east part of the study area - otherwise the full retention of the green belt could prove to be at the expense of the economic development necessary to prevent decay in the area. Any incursions into the green belt which might be found to be necessary in implementing the Council's proposals would be limited, and, against this, the proposals would preserve the value of countryside in the western part of the area, including Todmorden, and enhance it.

11. Another matter general to the whole area is the condition of the shopping, administrative and commercial centres of the towns. In common with many northern industrial areas, these communities have poor centres badly in need of improvement. Something has already been done, for example in Elland, and much is planned; the Council endorse this. Redevelopment is expensive. It must be soundly based, and there are safeguards to ensure this. Fortunately, leaving aside extensive rebuilding, much can be done throughout the area by reconditioning and by careful, sympathetic planning for the needs of pedestrians and vehicles. Many other projects, such as new roads and housing re-development, provide opportunities for improving road frontages and bring ribbons of poor shopping into a more compact form. It is often sufficient to aim at creating a smart, compact shopping centre where people can move freely among modern shop fronts set in characterful old buildings. The Council recommend the rehabilitation aspects of town centre work for local study and action, perhaps on "Civic Trust" lines. This approach may also be applied to some of the old villages, where a sympathetic blend of improvement and redevelopment can improve the whole area without losing its character. The Council consider that local character, properly used, is a social and economic asset of considerable importance.

12. The remainder of the Council's proposals are set out separately for the four sectors into which the study area is divided:-

(a) Brighouse, Elland and south Halifax.

(b) The rest of Halifax and Sowerby Bridge.

(c) Ripponden, Hebden Royd and Hepton.

(d) Todmorden.

In treating these areas separately there is no question of drawing a hard and fast line between them. The proposals are made for the benefit of the study area as a whole, and even where investment is concentrated in one particular locality it will bring benefits to a wider area.

## BRIGHOUSE, ELLAND AND SOUTH HALIFAX

13. The study suggests that this sector has the best prospects. It will have a location adjoining the M.62 and a substantial investment in roads in addition to the motorway. It is surrounded by a well-populated

area and is least affected by difficult physical conditions. The Council consider that a special effort should be made to realiee this potential. Here is the best chance of economic growth taking place, and investment in thie locality would provide a focus for the economic regeneration which the area so urgently needs.

14. It is in this part of the area that we envisage commercial and industrial growth. Room must be found for industry already here wanting to expand and for new undertakings wishing to come in. The likeliest prospects in the short term are warehousing and road haulage attracted by the motorway and these, once established, may lead to packaging and processing activities. The Council think that firms wishing to establish bridgeheads in the area should be encouraged by all concerned even if their first establishment does not give high employment per acre.

15. Housing will also benefit from the advantages. The prospects for new private enterprise housing must generally follow those for industry and commerce. The Council therefore propose that allocations of land for housing should be sought here, giving scope for a range of house types with good layout and design. Thie would encourage an increase in the output of houses and would help to raise the etandards in the area. For industrial development in particular, it will be necessary to have suitable sites of adequate size to give the flexibility necessary for development and to secure a high quality of planning. The powers of the local authoritiee and/or the Land Commission to acquire land must be used if need be.

HALIFAX (REMAINDER) AND SOWERBY BRIDGE

16. This sector contains some of the country's leading undertakings. It is the economic core of the study area and will continue to be so. The chief gains are to be made by pressing further ahead with the introduction of modern equipment and up-to-date methode and this must be the main solution to the problem of labour shortage whioh now besets the area. It should also create higher paid jobs with better working conditions; firms which do not provide these opportunities, as the pace steps up, must expect to lose their labour to those who do. The Council commend the scheme in operation in Halifax to link the provision of houses and jobs for incoming workers.

17. Good sites for new industrial development are not easily come by in this sector. Much of the land will be needed for industries being displaced by road and other redevelopment schemes. Although these operations cause much disturbance to individual enterprisee, the Council think that their total effect is salutary in that they afford opportunities for moving to more efficient premises. The Council recommend that sufficient land should be allocated for industry to meet the needs of displaced firms and for the expansion of exieting industry insofar as this is possible. The industrial investment in the area is considerable and industry by its efforts makes a valuable contribution not least to exports. Expansion which is feasible and which would inorease this contribution is to be encouraged.

18. The town centre of Halifax has a dominant position in the area, and the Council welcome the work the Corporation are doing in planning improvements to strengthen the town's trading position.

RIPPONDEN, HEBDEN ROYD AND HEPTON

19. This sector consists of a number of small communities sited mostly in steep sided valleys in attractive moorland. Historically they were small independent industrial places, but the Council see their future being increasingly bound up with Halifax. Ripponden in particular has developed successfully as a residential area for people working in Halifax, although it retains some places of employment of its own. The Council do not, however, see prospects of providing a level of employment which will support the total resident population. Indeed, to aim at this would be to divert effort from more hopeful lines and could impair the amenities.

20. To assist this change in emphasis, road communications need to be improved to give easier access to employment in Brighouse and Halifax. The Council consider that the A.646 which is at present the only all-weather route through to Lancashire needs to be greatly improved at the earliest possible date. This will not only bring an improvement in accessibility but also provide an opportunity to clear up the dilapidated buildings and sites which border the present inadequate road. The Council underline this special aspect of the environmental problem and draw attention to the opportunities which a project for road improvement will present for dealing with it.

21. Large parts of this area have outstanding potential for recreation. This potential should be realised; the Council recommend the establishment of a Country Park under the forthcoming Countryside Act, and suggest that the area designated should include Hardcastle Crags, and the area north of Hebden Bridge generally with at least one of the reservoirs capable of use for recreation. Consideration of such a proposal could well be linked with consideration of the green belt in the study area.

TODMORDEN

22. Todmorden is the most isolated part of the study area and is subject to particularly severe physical and environmental problems. The Council admire the efforts which have been made to foster industry, but are not able to envisage any major new development. Good communications - the excellent rail services and the proposed road improvement - should reduce the relative isolation of the town and enable people to live here and work elsewhere.

23. In the Council's view the industrial prospects are limited and by themselves will not bring about a revived Todmorden. The town has its attractions; the countryside is fine, and may well attract poeple from both sides of the Pennines. But the existing housing stock is poor, sites for new housing are not easily available and the town centre needs improvement.

24. The location of Todmorden is unfavourable to modern economic activity and the Council do not wish to hold out unrealistic hopes of growth for this part of the study area. They fear a continuation of the decline of population. The pace of this decline and the level of stability ultimately reached will be determined by local efforts and by action taken by Central Government to ease the inevitably painful process of adjustment of a town of this size to modern conditions, in which it becomes increasingly dependent upon its commuting linkages with both Yorkshire and Lancashire.

25. The significance of these linkages would need to be further considered in the light of a study of North East Lancashire which the North West Economic Planning Council are putting in hand.

## CONCLUSIONS

26. The Council, on the basis of the results of the study, have put forward their views about the job to be done in the Halifax/Calder Valley area. It is a job which the Council cannot themselves do. The responsibility for action to implement the proposals in detail rests with others.

27. The Council in formulating their proposals have not been able to make a cost-benefit comparison with other proposals elsewhere in the region for improving the infrastructure. The influence of the M.62 and the benefits it will bring to the study area, and beyond, in particular, need further study. It is the Council's view, however, that their present proposals represent a minimum need in order to arrest and control the decline which the study area has for a long time been facing.

28. The Council are convinced that if action is taken within the framework of their proposed strategy, then at long last the decline in this part of the region which has been going on for years can be arrested, as it should be.

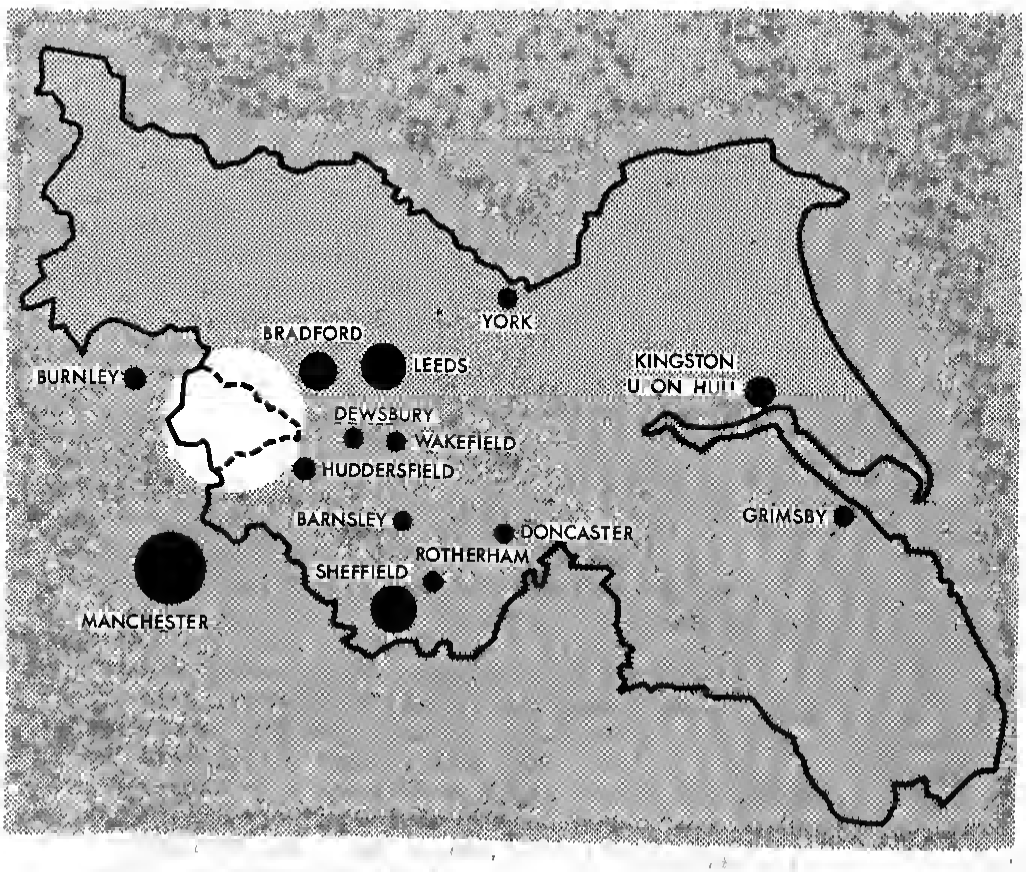


**Fig.1. YORKSHIRE AND HUMBERSIDE ECONOMIC PLANNING REGION AND THE STUDY AREA**

# PART TWO: THE STUDY

## 1. THE STUDY AREA

### DELIMITATION

1. The study area as defined for the purpose of this study is shown in Figs. 1 - 4. In 1966 it had a population of some 196,000. It includes the County Borough of Halifax (95,000) and the various communities in the upper Calder Valley - from Todmorden in the west to Brighouse in the east. Apart from the less elevated country at the eastern end and the valleys of the Ryburn and a few other tributary streams, the remainder of the area is a sparsely inhabited moorland plateau, 1,000-1,400 feet above sea level (Fig. 4). The difficult terrain has given the area a high level of self-containment in the sense that there is a comparatively small volume of movement across the boundary of people travelling from home to work.

2. In 1961 the daily movements over the study area boundary were approximately in balance and the inward and outward flows were each equivalent to some 7½% of the resident economically active population. Thus 92½% of the population both lived and worked in the area. This is a high proportion considering that the study area has boundaries in common with the County Boroughs of both Bradford and Huddersfield.* Indeed, the journey to work movement into and out of Brighouse M.B. at the eastern extremity of the study area accounted for two-fifths of the total gross movement. Brighouse has a high level of interaction with Halifax, Bradford and Huddersfield, and its inclusion in this study area, rather than an area based on either of the other County Boroughs, is inevitably somewhat arbitrary. It was decided to include it because of the difficulty there would otherwise have been in reconciling statistics based on local authority areas and Employment Exchange areas.

3. Bearing in mind this unavoidable weakness in the delimitation of the eastern boundary of the study area, the otherwise high degree of self-containment is extremely important to the present analysis. It ensures that the area is a meaningful unit for the analysis of industry, population and the infrastructure and their complex inter-relationships.

4. The local authorities which comprise the study area are shown in Fig. 2. This study also makes use of data for Employment Exchange areas, and these also are shown. It will be seen that insofar as the outer boundaries of these two sets of areas are concerned, the discrepancies are not great. In terms of population, the difference involves a resident population of some 5,000 and no major places of employment are involved. The south-east boundary of the study area coincides approximately with the line of the Lancashire-Yorkshire motorway (M.62) now under construction.

* For further discussion of this point, see Ch. 2.

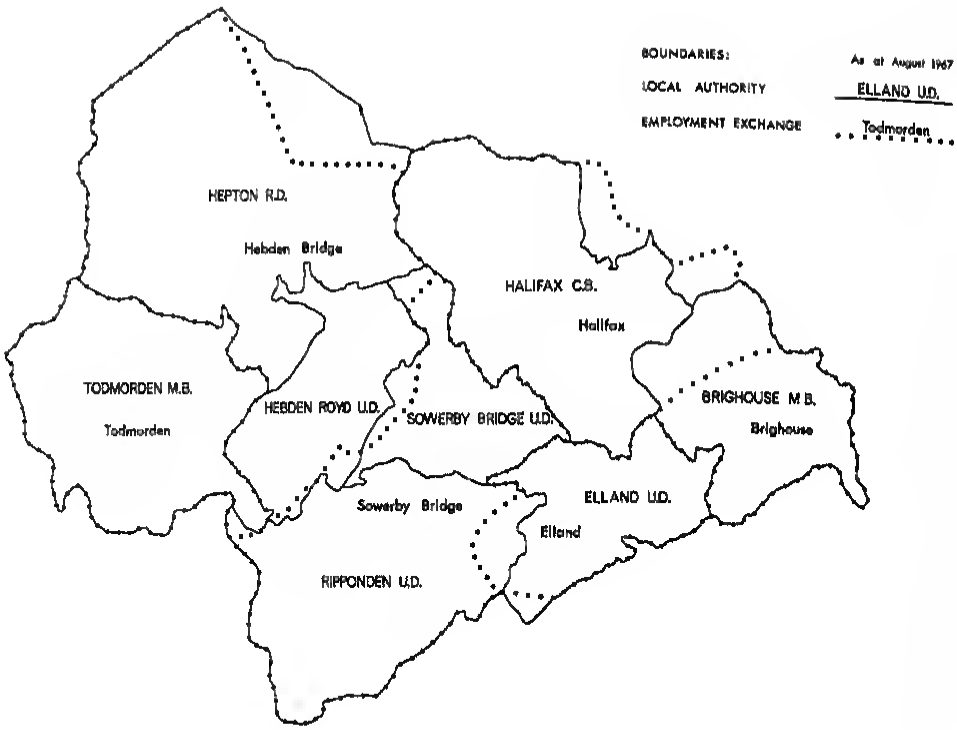


**Fig.2. LOCAL AUTHORITIES AND EMPLOYMENT EXCHANGES**

## GEOGRAPHICAL AND HISTORICAL BACKGROUND*

5. The area comprises a section of the Pennines on the east side of the main watershed. Predominantly upland in character, it consists of a system of narrow steep-sided valleys etched into a plateau of Millstone Grit and Lower Coal Measures which dip gently to the east. Except for the high and rather bleak plateau moorlands there is very little flat land in the study area. The narrow valley of the Calder accommodates not only some of the principal settlements (other than Halifax), but also a trunk route across the Pennines (A.646), the Leeds-Manchester rail route via Bradford, Halifax and Rochdale; and a canal. The physical constraints on development are a factor of considerable importance and are discussed in Chapter 5.

6. The area expanded most rapidly in the first half of the 19th century. Then Halifax began to fall behind its rival, Bradford, when steam replaced waterpower. Although coal seams were present in the valley they were generally thin and of poor quality. As they were worked out, mining moved further east and out of the area. In addition, owing to the physical difficulties of the Calder valley, canal and rail links reached Bradford and Huddersfield earlier, so giving them an extra advantage over Halifax.

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* Material for much of this section has been drawn from Factors Affecting the location of industry, e.g. Halifax, by D.I. Scargill in Geography XLVIII April 1963 p.166 ff.

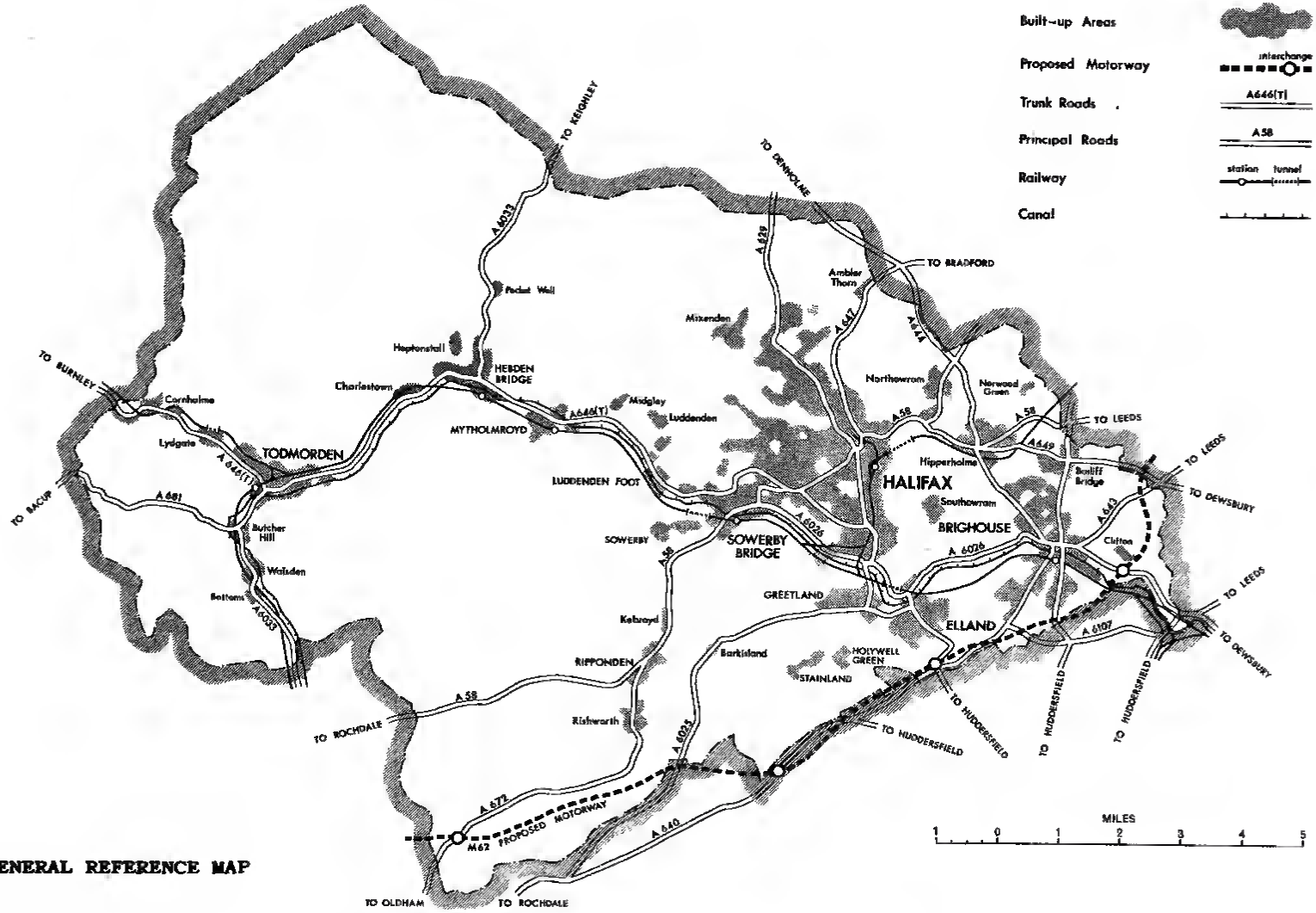


**Fig.3. GENERAL REFERENCE MAP**

7. Over and above these local factors, the textile industry suffered a number of serious setbacks with the loss of overseas markets in the late 19th and early 20th centuries. This has had some beneficial side-effects in that a certain degree of industrial diversification has resulted from the introduction of new industries attracted by the availability of cheap premises, mainly abandoned textile mills. But the fortunes of the textile industry have been the dominant factor in the history of the local economy and this is reflected in population trends.

8. Whereas the population of the area rose rapidly in the first half of the 19th century, it has declined steadily since 1901. The only other urban areas of comparable size in England and Wales to have experienced a consistent absolute decline in population even since 1921 are the coal mining valleys of South Wales and a number of the cotton towns of N.E. Lancashire. (We exclude here towns where population decline in the centre has been offset by the growth of suburbs in adjoining local authority areas.) The population statistics for the study area are set out in Table 1 and shown diagrammatically in Fig. 5. In the period 1901-66 the area lost some 31,000 population (13½%). But this occurred when the population of the remainder of the region was increasing so that the study area's share of the region's population fell from 6.5% to 4.2%. Between 1961 and 1966, the area lost 1.1% of its population.

TABLE 1. POPULATION OF THE STUDY AREA, 1901-1966

| Year | Population | Proportion of Yorkshire and Humberside Population (per 1,000) | Proportion of Great Britain Population (per 10,000) |
|---|---|---|---|
| 1901 | 226,800 | 65 | 61 |
| 1911 | 224,600 | 58 | 55 |
| 1921 | 215,000 | 53 | 50 |
| 1931 | 211,900 | 50 | 47 |
| 1951 | 205,700 | 46 | 42 |
| 1961 | 198,000 | 43 | 39 |
| 1966 | 195,800 | 42 | 37 |

## THE PRESENT LOCAL ECONOMY

9. Although data on employment have limitations as an indicator of the relative importance of particular industries, they are the best available guide. Estimates of employment in those industries of importance in the study area are shown diagrammatically in Fig. 6. The figures are expressed as a ratio of total employment so that the local employment structure may be compared with that of Yorkshire and Humberside.

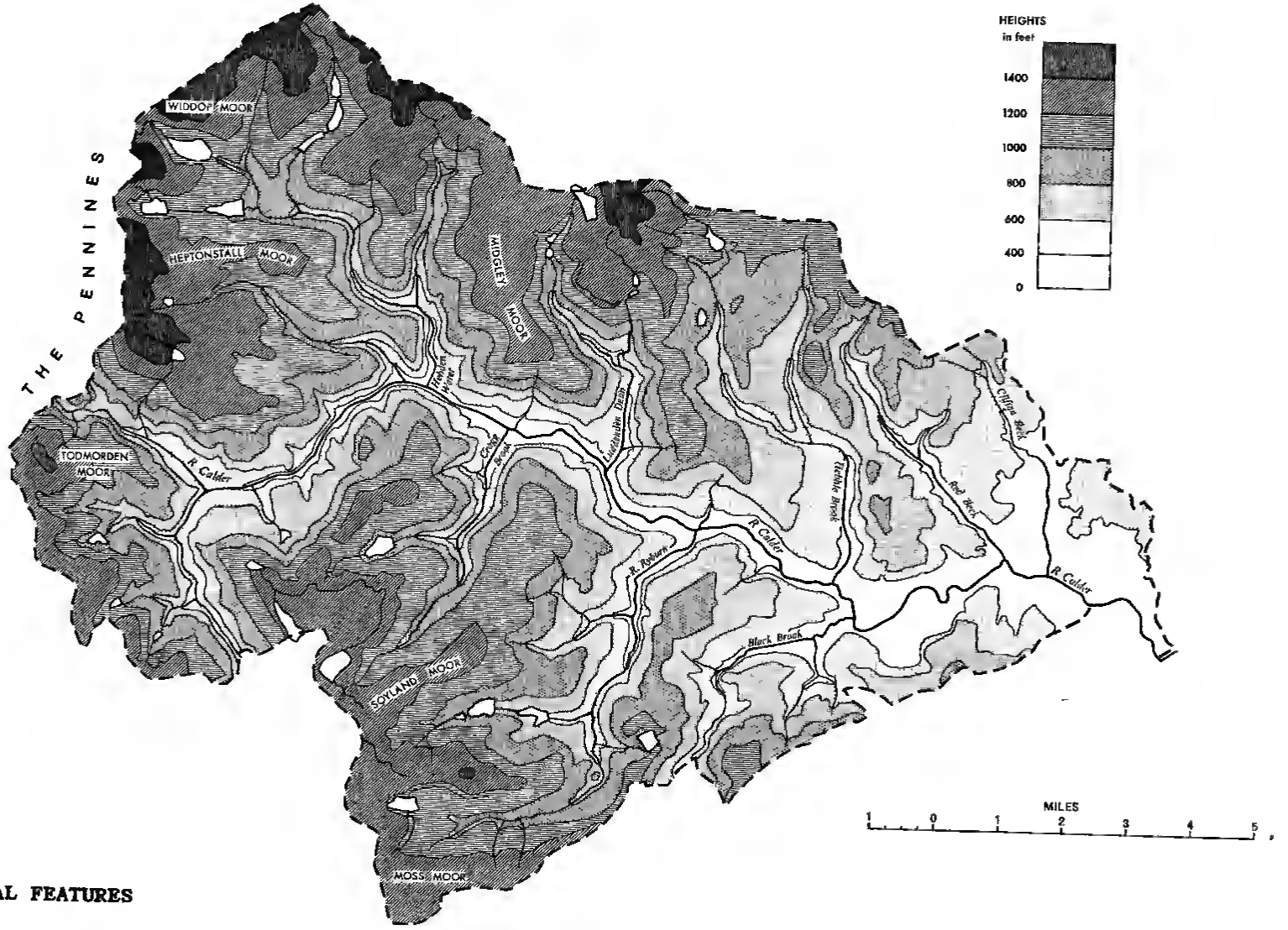


**Fig.4. PHYSICAL FEATURES**

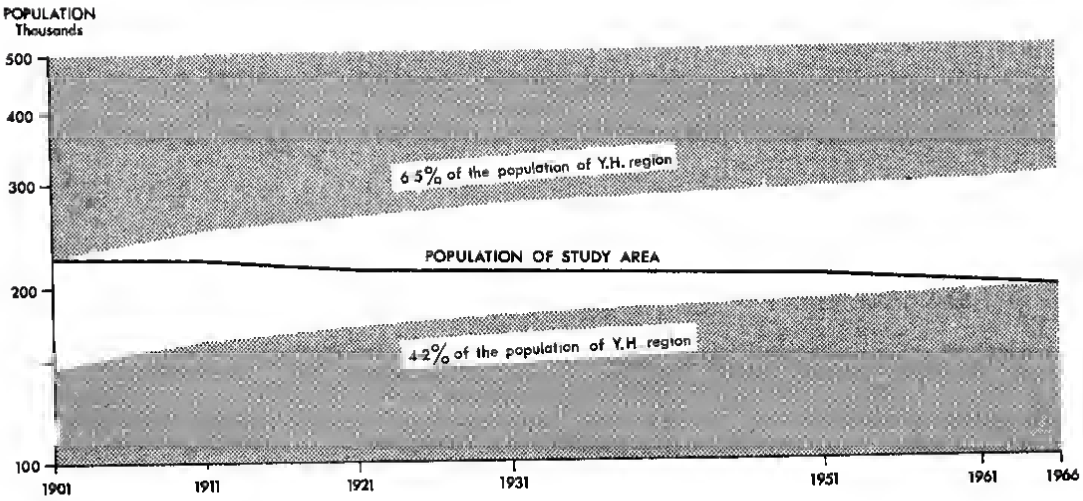


**Fig.5. STUDY AREA - POPULATION CHANGES 1901 - 1966**

During the 65 years between 1901 and 1966 the proportion of the population of the study area living in Yorkshire and Humberside has ranged between 6.5% (in 1901) and 4.2% (in 1966). The population of the study area at each census is plotted on a logarithmic scale; populations equivalent to 6.5% and 4.2% of Yorkshire and Humberside at each census are also depicted. The diagram thus affords a comparison between rates of growth in the study area and in Yorkshire and Humberside, and shows how the study area's share of the region's population has fallen.

MANUFACTURING

10. The outstanding fact revealed by these statistics is the great importance of ths manufacturing industries, and the dominance of textiles in particular. 65% of all employees are engaged in manufacturing compared with about 43% regionally and 38% nationally. Textiles, with 30% of all employees, is the largest industry in each of the towns but its composition varies - woollen and worsted, ths largest sector, is important in Halifax, Sowerby Bridge and Hebden Bridge; cotton spinning and weaving is centred on Todmorden but is to be found in each of the towns; carpets are manufactured in large factories in Brighouse and Halifax and to a lesser extent in Sowerby Bridge; and textile finishing is practised throughout ths area.

11. Engineering, the second largest industry with 12% of all employess, is mechanical rather than electrical and is centred on Halifax and Brighouse. Halifax is an important centre for machine tools, the largest sector in engineering, but it has a variety of other engineering activities including small tools, textile machinery, domestic electrical appliances and industrial plant and steelwork. Brighouse has a large firm making industrial valves and also produces mechanical handling equipment and machine tools. Food products with 6% of all employees are almost entirely in Halifax where large firms produce toffees, chocolates and biscuits. Thsre are several breweries. Clothing has 4% of all employees and is centred on Halifax and Hebden Bridge; the latter specialises in men's and boys' tailored outerwear but Halifax produces a wider range of garments from overalls to ladies' coats, suits and dresses.

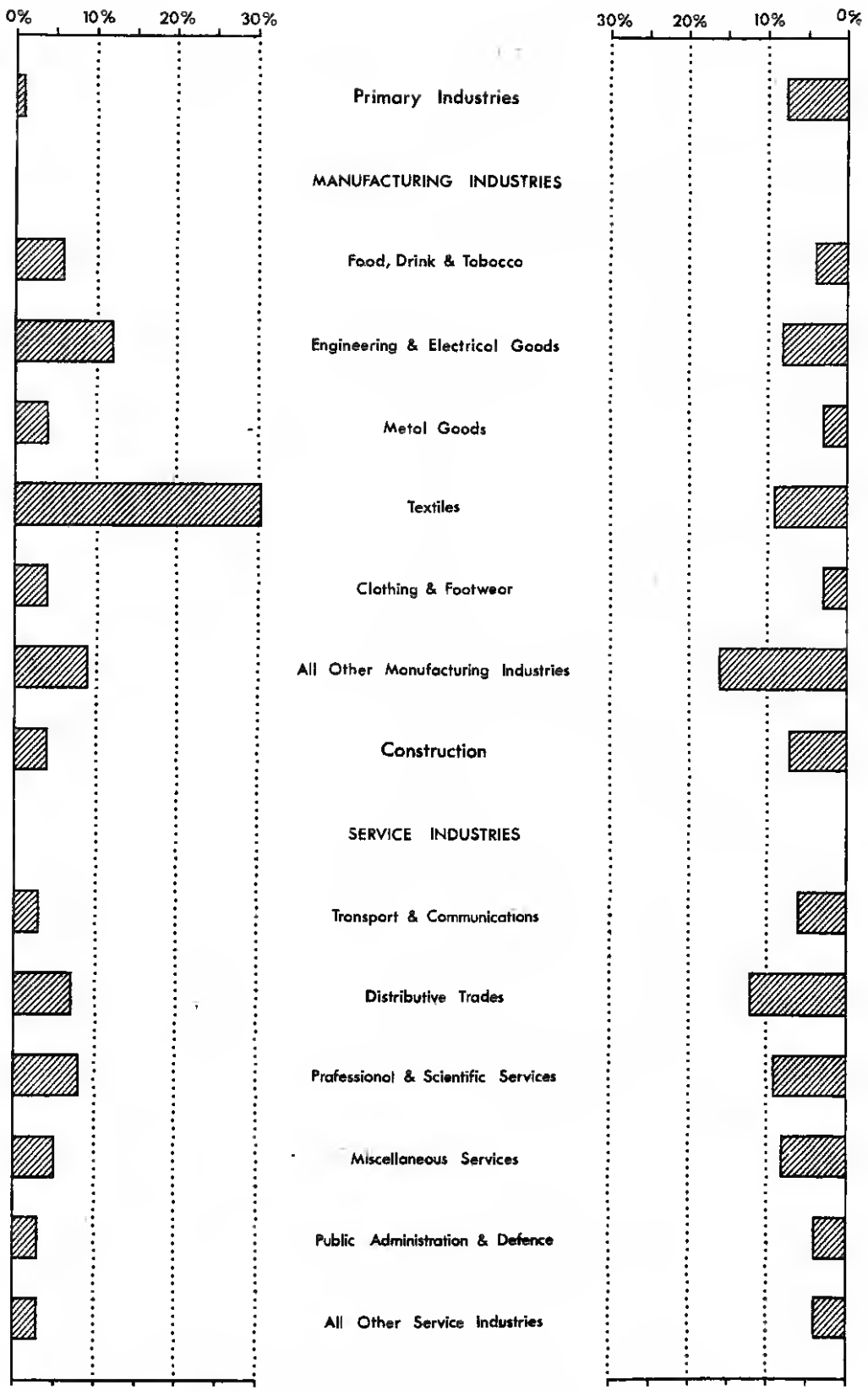


**Fig.6. DISTRIBUTION OF TOTAL EMPLOYEES IN STUDY AREA AND YORKSHIRE AND HUMBERSIDE 1966**

The lengths of the bars are proportional to the numbers of total employees in industrial orders or groups of orders.

SERVICES

12. The services group of industries is correspondingly under-represented in the local economy. Although no adjustment has been made to study area figures for "unlocated" workers*, many of whom are in the service industries, it is quite clear that employment in this sector is considerably below the regional and national averages. This applies generally to the service industries, but particularly to distribution and to transport and communications. The proximity of Bradford, Leeds and Manchester as important service centres is clearly relevant here. Whereas for an isolated town such deficiencies would probably act as a barrier to economic growth, the study area is able to benefit from easy accessibility to these centres nearby.

13. One firm provides an important exception to this general picture. The head offices of the Halifax Building Society create employment based on business transacted throughout the country. Nevertheless this does not go very far towards counteracting the general deficiency in service employment in the area.

OTHER SECTORS OF THE LOCAL ECONOMY

14. Apart from manufacturing industries and services there are two other sectors of the local economy; primary industries and construction. Both are very small. Employment in the primary industries is principally in agriculture. There are rather less than 1,500 holdings in the study area; they comprise over 30,000 acres of crops and grass (i.e. an average of barely 20 acres apiece), and nearly 10,000 acres of rough grazing. There is also a flourishing poultry rearing industry in the area making use of old industrial buildings. The agricultural economy has been excluded from this report because there are no features peculiar to the study area - its farming practice and problems are reproduced throughout the industrial Pennines. Some important questions are however building up across this wider spectrum of which the study area is but a part; for example how far and how quickly farm structure is likely to be strengthened by recourse to the new retirement and remodelling grants; how far and how quickly higher production and productivity will be stimulated by the new forms of assistance towards hill land improvement; and whether experience gained from the proposed "pilot" Rural Development Board in the northern Pennines might have any application in the industrial belt further south. The construction industry, like the services sector is poorly represented. Far from contributing to the economic base of the area, the low employment figure would appear to reflect a low level of investment in the infrastructure (see para. 123).

## 2. HUMAN RESOURCES

15. In the previous chapter it was shown that the long-term trend in the population of the study area has been one of steady decline since 1901. This chapter begins by examining in greater detail the trends since 1951. They throw light on the general state of the local community and explain the present age and sex structure of the population. This in turn is the basis of the future pattern of population change which is of course subject to modification by migration. An important subsidiary theme runs through this section

* i.e. workers not included in local estimates; see Appendix D.

of the chapter; the marked variations as between one part of the study area and another. The chapter continues with a brief discussion of community life in the area. An examination of the effective sizes of labour catchments is followed by a number of qualitative assessments of the labour force based on such data as is available.

## POPULATION TRENDS, 1951-66

16. The 1966 population of the study area of some 196,000 represented a decrease of 3.9 per cent over the previous 15 years compared with a regional increase of 5.5 per cent and a national increase (England and Wales) of 9.8 per cent. Details of these changes are shown in Table 2 which also gives data for the constituent local authority areas in the study area. It will be seen that the overall decline results from the combination of two factors:-

(i) a very low natural increase (excess of births over deaths) of 1.4 per cent compared with the region (+7.4 per cent) and England and Wales (+7.8 per cent).

(ii) a substantial loss attributable to an excess of outward over inward migration movements (-5.3 per cent).

17. These overall trends may be examined in more detail both geographically and over time. Appendix B.1 includes a series of tables similar to Table 2 for the periods 1951-56, 56-61, 61-62 and 62-66. In addition, migration data for these periods are shown geographically in Fig. 7. A number of significant points emerge from a study of this information. The contrast between the eastern and western parts of the study area is marked. The proportionate decline of population in the western part is very considerable. Not only has the rate of outward migration been higher; there has also been an excess of deaths over births (natural decrease). As a result, Todmorden M.B., Hebden Royd U.D., Sowerby Bridge U.D. and Hepton R.D. all lost over 10 per cent of their population in the period 1951-66. The remainder of the area suffered comparatively moderate losses of population except Brighouse M.B. at the eastern extremity which grew both by natural increase and net inward migration.

18. An examination of the changes within the period 1951-66 shows that with the exception of the year 1961-62, when immigration from the Commonwealth was at its height, the pace of net outward migration has quickened. In the last four years (1962-66), loss by migration averaged 0.50 per cent per annum compared with an average loss of 0.35 per cent per annum for the fifteen year period as a whole (see Appendix B.1). However, this was partially offset by a higher rate of natural increase. This information refers to net migration only, with no indication of the level or direction of the inward and outward movements. Such information became available for the first time with the publication of the 1961 Census. Although there are limitations in that the information is based on a 10 per cent sample and refers to migration in the year 1960-61 only - a year which tends to be untypical - it is nevertheless of interest.

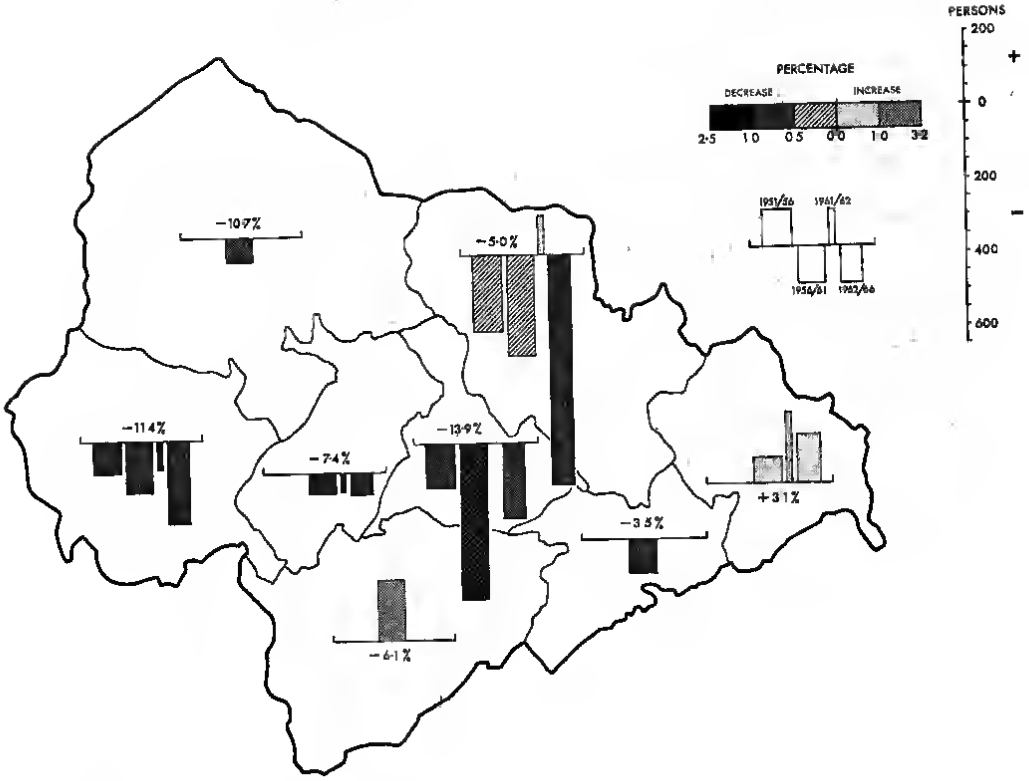


**Fig.7. HOME POPULATION: ESTIMATED "BALANCE INCLUDING MIGRATION" STUDY AREA BY LOCAL AUTHORITIES 1951 - 1966**

The height and widths of the columns are proportional to the mean annual net gain or loss by migration and to the lengths of the period respectively. Thus, volume of net migration is represented by the area of the columns. Net movements of less than 50 persons are not shown. The hatching indicates the proportion of mean annual migration to the population. Percentage change over the period 1951-1966 as a whole is given in figures. The total net migration 1951-1966 for the study area showed a loss of 10,860 or 5.3%.

19. The only part of the study area for whioh a fairly full range of information is available is Halifax C.B. The broad pioture is as follows:-

| | |
|---|---|
| Total immigrants into Halifax C.B. | 3360 |
| Total emigrants out of Halifax C.B. | 3280 |
| Net inward movement (1960-61) | +80 |

This illustrates the point that the net movement is frequently the differenoe between very muoh larger outward and inward movements. In this year, rather against the trend for the 1951-66 period as a whole, the net balance was positive. Further examination of the data (whioh is reproduced in Appendix B.2) shows that the rest of the West Riding accounted for 65 per cent and 74 per cent respectively of the inward and outward movements. Much of this was of course, purely local

TABLE 2. HOME POPULATION CHANGES 1951 - 1966

| Area | Home Population 1951 | Changes 1951 - 66 | | | | | | Home Population 1966 |
|---|---|---|---|---|---|---|---|---|
| | | Total | | By Births and Deaths | | Estimated Net Balance including Migration | | |
| | | No. | % | No. | % | No. | % | |
| England and Wales | 43,800,000 | + 4,275,300 | + 9.8 | + 3,430,800 | + 7.8 | + 844,500 | + 1.9 | 48,075,300 |
| Yorkshire and Humberside | 4,484,050 | + 248,060 | + 5.5 | + 330,868 | + 7.4 | - 82,808 | - 1.8 | 4,732,110 |
| Study Area | 204,295 | - 7,925 | - 3.9 | + 2,932 | + 1.4 | - 10,857 | - 5.3 | 196,370 |
| Halifax C.B. | 97,490 | - 2,540 | - 2.6 | + 2,324 | + 2.4 | - 4,864 | - 5.0 | 94,950 |
| Brighouse M.B. | 30,500 | + 1,840 | + 6.0 | + 885 | + 2.9 | + 955 | + 3.1 | 32,340 |
| Elland U.D. | 19,070 | - 550 | - 2.9 | + 113 | + 0.6 | - 663 | - 3.5 | 18,520 |
| Hebden Royd U.D. | 10,180 | - 1,190 | - 11.7 | - 433 | - 4.3 | - 757 | - 7.4 | 8,990 |
| Ripponden U.D. | 5,309 | - 369 | - 7.0 | - 43 | - 0.8 | - 326 | - 6.1 | 4,940 |
| Sowerby Bridge U.D. | 18,750 | - 2,060 | - 11.0 | + 551 | + 2.9 | - 2,611 | - 13.9 | 16,690 |
| Todmorden M.B. | 18,920 | - 2,580 | - 13.6 | - 425 | - 2.2 | - 2,155 | - 11.4 | 16,340 |
| Hepton R.D. | 4,076 | - 476 | - 11.7 | - 40 | - 1.0 | - 436 | - 10.7 | 3,600 |

movement across the boundary of the County Borough. But it was not haphazard; the figures available for movements between Halifax and individual local authority areas show that over 60% of the migration was in an easterly direction.

20. An indication of the broad age and sex structure of the net migration movement may be obtained by comparing the structures of the population at successive Census dates making allowances for the number of deaths in the period. This exercise was carried out for the study area for 1951-61 and 1961-66, although the youngest and oldest sectors of the population were excluded. In 1951-61, all the groups experienced net loss by migration except one - males aged 15-24 in 1951. This is an anomaly which frequently occurs in this type of analysis, and is attributable largely to the reduction of the Armed Forces. Apart from this anomaly, the outward movement is fairly consistent throughout the age groups. For both sexes, the highest proportion of losses were within the age group 55-64.

21. It would appear that in 1951-61, the migration loss was made up of fairly representative cross-sections of the population, at least so far as age and sex were concerned. It is frequently asserted that when migration losses occur, they tend to be selective and deprive an area of an undue proportion of the young adult population. Although this may well have occurred in the past in the study area - and the low proportion of persons under 40 in 1951 suggests this - the experience of the following ten years shows that the older age groups were rather more responsible for the net loss by migration than the younger.

22. In the period 1961-66, similar trends of general net loss by migration were apparent. There was, however, an increase in the anomalous inward movement of males aged 20-29, most of whom can be accounted for by an increased level of immigration of young men from the Commonwealth, particularly to Halifax. The number of males over 60 years of age leaving the area also appears to be rising.

23. Appendix B.3 sets out details of the age and sex structure for 1951, 1961 and 1966. Table 3 gives information on the age structure in very simple terms by expressing the population under the age of 40 as a percentage of the total. The study area has a smaller proportion of people under 40 than the region or the country as a whole, and a larger proportion of older people. The 1966 age/sex structure is reproduced as Table 4. This illustrates two particularly marked characteristics in comparison with the regional and national structures; the markedly low proportions of males and females aged 15-39 and the very high proportion of females aged 60 and over.

TABLE 3. PROPORTION OF TOTAL POPULATION UNDER THE AGE OF 40 IN 1951, 1961 AND 1966

| Area | 1951 | | 1961 | | 1966 | |
|---|---|---|---|---|---|---|
| | % age under 40 | Index (E.& W.= 100) | % age under 40 | Index (E.& W.= 100) | % age under 40 | Index (E.& W.= 100) |
| Study Area | 52.6 | 92 | 52.0 | 93 | 52.8 | 95 |
| Yorkshire and Humberside | 57.4 | 101 | 56.0 | 101 | 56.0 | 101 |
| England and Wales | 57.1 | 100 | 55.8 | 100 | 55.7 | 100 |

TABLE 4. AGE AND SEX STRUCTURE OF THE POPULATION, 1966

| | Study Area | | Yorkshire & Humberside per '000 total population | England & Wales per '000 total population |
|---|---|---|---|---|
| | Number | per '000 | | |
| MALES aged:- | | | | |
| 0-14 | 22,560 | 115 | 121 | 118 |
| 15-39 | 30,300 | 155 | 164 | 165 |
| 40-64 | 30,850 | 158 | 156 | 154 |
| 65 & over | 9,370 | 48 | 46 | 47 |
| Total | 93,080 | 476 | 487 | 484 |
| FEMALES aged:- | | | | |
| 0-14 | 20,860 | 107 | 115 | 112 |
| 15-39 | 29,600 | 151 | 160 | 162 |
| 40-59 | 27,480 | 140 | 132 | 134 |
| 60 & over | 24,750 | 126 | 105 | 108 |
| Total | 102,690 | 524 | 512 | 516 |
| TOTAL POPULATION | 195,770 | 1,000 | 1,000 | 1,000 |

## FUTURE POPULATION OF THE STUDY AREA

24. The future rate of natural change depends largely on the present age and sex structure as modified by migration movements. A calculation has been made of the natural increase which may be expected from the existing population by 1971 or 1981. In the same way as in A Review of Yorkshire and Humberside the projection is controlled by a projection of total population for England and Wales made by the Government Actuary in 1964. This takes account of trends in fertility rates, age of marriage, family size, the impact of medical science on the expectation of life and other relevant influences.

However, no allowance is made for the effects of migration after 1964. This projection has been apportioned to local authority areas taking account of the factors referred to above wherever practical. The results for the study area show an estimated natural increase of 17,800 (9.0%) over the period 1964-81. This compares with a projected change of 13.9% for the region.

25. An estimate has been made of the proportion of the projected population which will be of working age. The basic data is available for Halifax C.B. only. The results are shown in Table 5.

TABLE 5. PROJECTION OF POPULATION OF WORKING AGE;
HALIFAX C.B. 1961-71-81
(assuming no migration after 1964)

| | 1961 | 1971 | 1981 |
|---|---|---|---|
| | % | % | % |
| Males 15-64 | 31 | 30 | 29 |
| Females 15-59 | 30 | 28 | 27 |
| Population of Working Age | 61 | 58 | 56 |
| (Yorkshire & Humberside) | (62) | (59) | (57) |
| (England and Wales) | (62) | (59) | (58) |

Even without taking into account possible net losses by migration the total population of working age is expected to decrease in the period to 1971 both proportionately and numerically. The change is expected to be more marked for women than for men of working age. In the period 1971-81, working age population is expected to increase somewhat, but not at the same rate as the dependent population. As a proportion of the total population, the population of working age in Halifax is therefore expected to fall to 56 per cent in 1981. This is similar to the expected regional and national trend.

26. These projections assess the potential growth inherent in the population as at 1964. They are not a forecast of the number of people who will actually be living in the area, as no account is taken of migration. As we have already seen, net loss by migration in the period 1962-66 has occurred at the rate of some 1,000 per annum, a large number being of working age. Taking into account the secondary loss represented by the loss of the natural increase attributed to these migrants, continuation of recent trends points to the following total populations:-

1964 197,300
1971 195,000
1981 190,000

Again, this is not a forecast of what the population will be. The rate of migration could well increase or decrease, either as the result of spontaneous changes in the local economy or changes of policy.

## COMMUNITY LIFE

27. The community life of the area should be regarded as a significant asset on account of the social stability, personal fulfilment and happiness which it brings. It is extremely difficult to assess either the strength of community life or its importance to human welfare owing to the absence of any satisfactory set of measurements. One possible approach to the problem would be to study the extent to which the local system of formal and informal social institutions is developed. Accepting that a well developed system is desirable, some indication of its value might be obtained by assessing the difficulties encountered by new communities in building up an equally well-developed system. The assessment of this problem provides a useful field for further study.

28. However, information on the local system of formal social institutions in Halifax is available from a study Social Enterprise by Mary Morris, (1962). This study was concerned with voluntary bodies in the town and is based on information received from 193 organisations (by no means all that existed).

Among the conclusions were:-

(i) the organisations covered a wide range of activities including meetings for business, educational and social purposes; group activities; personal service to others;

(ii) independent local societies (which accounted for one-third of the total) appear to be particularly strong in Halifax;

(iii) over the preceding twenty years there had been an increase both in the number and in the activities of the voluntary bodies. Some declined, a few died, but others changed and widened their scope while new ones were continually being formed;

(iv) recent trends in the comparative popularity of different activities would appear to follow national trends;

(v) "the overall picture both for social service and for leisure time is one of a large number of flourishing societies which are able to call on the loyal support of many members and voluntary workers".

29. The official handbooks of the local authorities in the Calder Valley reinforce the conclusions arrived at by Mary Morris, with their lengthy and diverse lists of local clubs and societies. In the field of voluntary societies, social institutions are clearly well developed. Perhaps the most notable recent evidence of the strength of both public and private local initiative has been the development of cultural activities. The Mid-Pennine Association for the Arts, which extends its activities into the Calder Valley, and the Calder Valley Festival of the Arts Society, both have impressive programmes involving artists of national standing. This kind of achievement indicates a considerable strength in local community life.

## SIZE OF LABOUR CATCHMENTS

30. An important aspect of the economic structure of an area is the way in which the labour force is disposed; whether the area is part of a large labour catchment area, or is one labour catchment area on

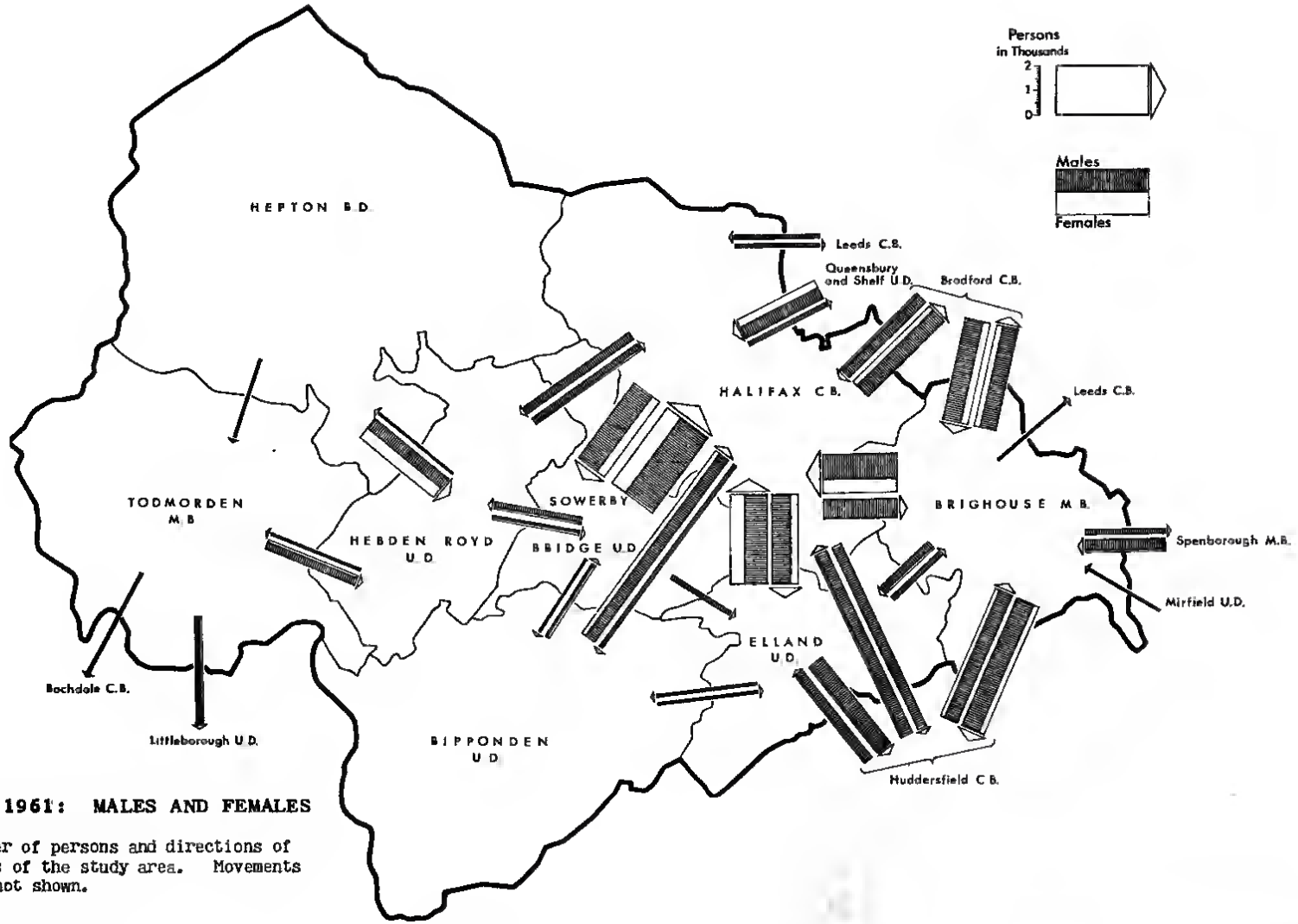


**Fig.8. JOURNEY TO WORK 1961: MALES AND FEMALES**

The arrows represent the number of persons and directions of movements to work by residents of the study area. Movements of less than 100 persons are not shown.

its own, or consists of a group of smaller areas. Such areas may be geographically distinct or overlap each other. Census statistics on the number of people living in one local government area and working in another, shown diagrammatically in Figure 8, enable a broad assessment to be made of the areas from which labour is drawn. They show large numbers of people travelling to work daily between Halifax C.B. and Sowerby Bridge and Elland U.D.e so that these must be considered part of the same catchment of male labour. (Women, particularly married women, tend to travel shorter distances and are often effectively restricted to areas within a short distance of the home.) The volume of the daily movement between Brighouse M.B. and its neighbouring areas indicates that the field of recruitment for employers located in the area is considerably larger than the occupied population living in the Borough. On the other hand, the interaction between Todmorden M.B. and its neighbouring areas was so small in 1961 as to suggest that Todmorden constituted an isolated and distinct unit for labour supply purposes.

31. Most striking however, particularly in relation to the population and close proximity of the Boroughs concerned, was the small scale of movement between Halifax and Bradford and between Halifax and Huddersfield. For instance, the persons who travelled from Halifax to work in Bradford (some eight miles from centre to centre) represented only 1.8 per cent of the total occupied population of Halifax. The opposite movement represented 0.4 per cent of the total occupied population of Bradford. The corresponding figures for the movement to Huddersfield (also 8 miles) were 1.1 per cent and 0.7 per cent respectively. In the West Yorkshire conurbation as a whole, only 2% of the total labour force in the six county boroughs were involved in exchanges between county boroughs, notwithstanding the fact that every one of them is within eight or nine miles (centre to centre) of at least two others. By comparison the seven county boroughs of the South East Lancashire conurbation exchanged some 61,000 commuters with each other. Even excluding the special cases of Manchester and Salford the number was still 37,000 - over 4% of the labour force of the county boroughs. (See A.J. Brown, What is the Leeds Region in Leeds and its Region, British Association 1967.) These figures suggest that an employer seeking labour in Halifax cannot expect to draw upon the reserves in a neighbouring county borough to any significant extent unless he is prepared to make a special effort to do so.

32. In our local discussion we were frequently assured that there was a general reluctance to travel more than a short distance between home and workplace. There are a number of possible reasons why this should be so, including:-

(i) the tradition of a short journey to work was established many years ago with the typical pattern of the mill surrounded by its workers' houses. This pattern is still in evidence;

(ii) physical factors make journeys more difficult than in flatter areas;

(iii) the scattered distribution of workplaces makes it difficult for public transport to mobilise the labour force effectively over a wide area; (a point discussed further in Chapter 5).

33. Short journeys to work have advantages, particularly the low private and social costs, but catchment areas as small as those in the study area have important disadvantages which could well impede economic growth. These include, to the employer, the inability to draw on significant reserves of labour of diverse grades and to meet sudden, large demands for labour as well as to assist in absorbing redundancies; and to the employee, a limited choice of jobs and poorer prospects of promotion. More research is required into the subject, however, and until such work is undertaken it is difficult to know how much weight to give to this factor.

## TYPE OF LABOUR AVAILABLE

34. The available information on the qualitative aspects of the supply of labour in the area covers:-

(a) Age structure

(b) Occupational structure - socio-economic groups

(c) Age on completion of full-time education

(d) Pupils remaining at school after the age of 15

### (a) Age Structure

35. An assessment of the age structure of the labour force can be made from the Census data. It should be noted that the information for females is a less reliable guide than for males as a much smaller proportion of females are at work. Also, some discrepancies are particularly liable to occur in the case of students in full-time education (affecting the 15-19 age group in particular) and the failure to account for men over 65 who remain economically active. Table 6 gives the data for 1966 and compares the age structure of the study area with that of England and Wales. It will be seen from Col. (7) that men under 44 are generally under-represented in the study area with a particular trough in the 30-34 age group. There is, on the other hand, a comparatively larger proportion of men over 44, the peak being in the 55-59 age group. The age structure of the female population of working age shows broadly similar characteristics (Col. 8), with the exception that there is a marked deficiency in the 25-29 and 30-34 age groups, while the study area is well placed for males of this age.

### (b) Occupational Structure - Socio-Economic Groups

36. The 1961 Census classifies the male population into a number of socio-economic groups - a concept based on occupation and employment status. This is a significant aspect of the type of labour in an area although there is no means of measuring the general level of ability within a group. Table 7 and Appendix B.4 give the relevant data. For the managerial and professional groups, the study area has the same proportion as the country as a whole, i.e. significantly higher than the region. However, it should be noted that when the individual groups are examined, there are comparatively more managers and less

TABLE 6. AGE STRUCTURE OF THE POPULATION OF WORKING AGE, 1966

| Age last birthday | Study Area | | Yorkshire and Humberside | | England and Wales | | Comparison of Study Area with England and Wales (= 100) | |
|---|---|---|---|---|---|---|---|---|
| | Males per '000 aged 15-64 (1) | Females per '000 aged 15-59 (2) | Males per '000 aged 15-64 (3) | Females per '000 aged 15-59 (4) | Males per '000 aged 15-64 (5) | Females per '000 aged 15-59 (6) | Col.1 with Col.5 Males (7) | Col.2 with Col.6 Females (8) |
| 15-19 | 124.1 | 129.1 | 127.0 | 134.8 | 124.3 | 129.9 | 99.8 | 99.3 |
| 20-24 | 95.2 | 107.6 | 101.9 | 108.9 | 104.6 | 112.5 | 91.0 | 95.6 |
| 25-29 | 99.9 | 91.5 | 95.0 | 99.8 | 95.9 | 100.5 | 104.2 | 91.0 |
| 30-34 | 82.9 | 89.7 | 92.3 | 99.7 | 93.7 | 99.4 | 88.5 | 90.2 |
| 35-39 | 93.4 | 100.7 | 96.9 | 104.4 | 98.1 | 105.5 | 95.3 | 95.5 |
| 40-44 | 99.4 | 111.4 | 105.9 | 116.5 | 104.6 | 115.3 | 95.0 | 96.6 |
| 45-49 | 98.0 | 109.1 | 97.5 | 107.6 | 96.6 | 108.9 | 101.4 | 100.2 |
| 50-54 | 106.8 | 129.8 | 101.7 | 115.4 | 100.9 | 114.6 | 105.8 | 113.3 |
| 55-59 | 110.5 | 131.0 | 97.7 | 112.9 | 97.6 | 113.4 | 113.2 | 115.5 |
| 60-64 | 89.7 | - | 83.9 | - | 83.7 | - | 107.2 | - |

TABLE 7. SOCIO-ECONOMIC GROUPS OF THE MALE ECONOMICALLY ACTIVE POPULATION, 1961

| Socio-Economic Group | Number in each group per '000 occupied male population | | | Comparison of Study Area with England & Wales (E & W = 100) |
|---|---|---|---|---|
| | Study Area | Yorkshire and Humberside | England and Wales | |
| 1- 4 Managerial, Professional | 133 | 116 | 133 | 100 |
| 5- 7 Non-manual | 134 | 141 | 174 | 77 |
| 8-12 Manual etc. | 694 | 679 | 613 | 113 |
| 13-17 Others (including agricultural) | 39 | 64 | 80 | 48 |
| Total | 1,000 | 1,000 | 1,000 | - |

For further data, see Appendix B.4.

professional workers in the study area. As is to be expected in a manufacturing area the proportion of non-manual workers is very much less, and of manual workers correspondingly more. Data from the 1966 Sample Census show a broadly similar pattern for the study area when compared with the 1961 data. Unfortunately the information for England and Wales is not yet available.

(c) Age on completion of full-time education

37. The 1961 Census also gives data on the terminal education age of the population aged 25 and over in 1961. Table 8A summarises the results. If we take all those whose education terminated at the age of 17 or later as a measure of the extent to which the local population has attained higher academic qualifications, the study area has a comparatively poor record, but no worse than the Yorkshire and Humberside region as a whole. (See Table 8B.) It is rather better off for men and worse off for well-qualified women.

(d) Pupils remaining at school after the age of fifteen

38. Whereas the previous indicator referred to the educational attainment of the whole population, the present indicator refers to the attainment in recent years of young people only. Information on the number of pupils staying on at school after the age of fifteen has been made available through the Department of Education and Science. It relates to Halifax C.B. and the Calder and Ashlar Education Divisions of the West Riding. This area approximates to the study area*. Two measurements are used - pupils staying on at school until

* It includes the study area local authorities with the addition of Queensbury and Shelf U.D.

TABLE 8A. TERMINAL EDUCATION AGE OF POPULATION AGED TWENTY-FIVE AND OVER, 1961

| Area | | TERMINAL EDUCATION AGE (%) | | | | | |
|---|---|---|---|---|---|---|---|
| | | under 15 | 15 | 16 | 17-19 | 20 and over * | Not stated |
| Study Area | M | 74.3 | 10.4 | 7.0 | 3.5 | 2.7 | 2.1 |
| | F | 79.9 | 8.2 | 5.4 | 2.8 | 1.9 | 1.8 |
| Yorkshire and Humberside | M | 73.0 | 9.8 | 6.8 | 3.3 | 2.9 | 4.2 |
| | F | 74.7 | 9.3 | 6.0 | 3.4 | 2.2 | 4.4 |
| England and Wales | M | 65.5 | 11.1 | 7.8 | 5.2 | 4.0 | 6.4 |
| | F | 65.7 | 10.7 | 7.6 | 6.0 | 2.8 | 7.2 |

* including those for whom full-time education was continuing

TABLE 8B. TERMINAL EDUCATION AGE OF SEVENTEEN AND OVER: INDEX

| Area | | % | | Index (E & W = 100) | |
|---|---|---|---|---|---|
| | | Males | Females | Males | Females |
| Study Area | M | 7.0 | | 76 | |
| | F | | 4.7 | | 62 |
| Yorkshire and Humberside | M | 6.2 | | 67 | |
| | F | | 6.0 | | 79 |
| England and Wales | M | 9.2 | | 100 | |
| | F | | 8.8 | | 100 |

the ages of sixteen and seventeen, each expressed as a percentage of the total number of pupils aged thirteen three or four years earlier (as appropriate). The detailed figures show variations from one year to the next. To even these out, a three year moving average has been calculated. (See Table 9.) The results show that although the proportion of children staying on at school to the age of sixteen is somewhat lower in the study area than in the country as a whole, the proportion staying on to the age of seventeen is about the same. On this criterion, then, the educational attainment of young people in the study area is comparable with the national average.

TABLE 9. PUPILS REMAINING AT SCHOOL AFTER THE AGE OF 15

(a) Pupils remaining at school until the age of 16 as a percentage of those aged 13 three years earlier.

| Year | Study Area* | | Yorkshire & Humberside (three year moving average) | England & Wales (three year moving average) |
|---|---|---|---|---|
| | Annual Total | Three year moving average | | |
| 1961 | 17.7 | - | - | - |
| 62 | 16.9 | 17.9 | 18.1 | 20.1 |
| 63 | 19.1 | 18.9 | 19.6 | 21.2 |
| 64 | 20.6 | 19.9 | 21.5 | 22.6 |
| 65 | 19.9 | - | - | - |

(b) Pupils remaining at school until the age of 17 as a percentage of those aged 13 four years earlier.

| | | | | |
|---|---|---|---|---|
| 1961 | 10.4 | - | - | - |
| 62 | 10.2 | 10.1 | 9.5 | 10.4 |
| 63 | 9.8 | 10.5 | 10.4 | 11.0 |
| 64 | 11.5 | 11.5 | 11.4 | 11.6 |
| 65 | 13.1 | - | - | - |

* i.e. Halifax C.B. with the Calder and Ashlar Education Divisions. This is equivalent to the study area with Queensbury and Shelf U.D.

## 3. INDUSTRY AND EMPLOYMENT

39. The economic base of the study area was discussed in Chapter 1. It was concluded that the local economy is based almost entirely on manufacturing; the services sector is devoted predominantly to the satisfaction of local needs. In discussing the potential of industry in the area we therefore concentrate on the manufacturing industries although it is clearly essential to include employment in the services sector in the analysis of the overall relationship of industry and manpower. This chapter gives an account of recent changes and continues with a discussion of aspects of the present structure of manufacturing industry in the study area. Examination of the employment situation opens with an analysis of the current labour situation followed by a discussion of likely trends in the labour market in the foreseeable future. This leads to the formulation of a manpower budget - an exercise designed to provide an estimate of the likely supply of and demand for labour in 1971.

40. Much of the material in this chapter is derived from an industrial survey carried out as a major part of the study. Details of the survey are given in Appendix C. Briefly, a sample of 118 firms was chosen for the survey. Ten of these, including many of the largest firms, were interviewed, and the remaining 108 were asked to fill in a questionnairs distributed by post. The questions asked related to organisational aspects, site and services, the labour situation and location. Some of

the results are used in other chapters. The overall response - 88 replies and 10 interviews (83%) - was very gratifying. All except one of the 98 replies were from manufacturers, and 46% of the total employment in manufacturing was covered. In addition to the interviews and postal questionnaire survey, consultations were carried out with the Halifax and District Chamber of Commerce, the managers of Employment Exchanges in the area and the Youth Employment Officers. Industrial and employment questions arose also in our discussions with local authorities. Finally, enquiries were made of a number of firms which were known to have been involved in moving into or out of the study area in recent years, by either setting up branches or moving entirely. We are very grateful to all those who helped by providing information.

## RECENT TRENDS

41. An indication of recent industrial trends in the study area is given by employment statistics, but because of deficiencies in the basic data (see Appendix D) the estimate of changes should be regarded as only approximate. The numbers employed in each main industry group in 1966 are shown in Table 10. In the preceding years, the overall trend was one of decline. Between 1953 and 1966 the number of employees in the study area declined by 2,400 or 2.5% compared with increases of 8.8% regionally and 12.8% nationally. After 1959 the situation was static, while regionally and nationally the rate of expansion accelerated. Over the thirteen year period, Todmorden lost 1,700 employees (20%), Sowerby Bridge 1,100 (11½%) and Hebden Bridge 600 (9%). There was no change in Halifax, whilst there were increases of 900 (8%) in Brighouse and 200 (2%) in Elland. The basic information is given in Appendix D, and the geographical aspects illustrated in Figure 9.

42. Table 11 shows employment changes by broad industrial groups for the period 1959-66. (Trends over the full twelve-year period from 1953 are not available because of changes in the Standard Industrial Classification in 1958.) The manufacturing sector lost 1,600 employees overall in the period 1959-66. The lower part of the table shows the changes in the principal industries listed in order of numerical importance. Textiles suffered a net loss of 3,300. This figure was in turn made up of three principal components:-

| | | |
|---|---|---|
| Woollen and worsted | : | - 2,500 |
| Cotton | : | - 2,300 |
| Carpets | : | + 1,300 |

The sharp decline in cotton has been reflected in the local statistics for the western part of the study area, which specialised in the industry - Todmorden, Hebden Bridge and Sowerby Bridge (including Ripponden). Of these, only Todmorden retained a significant cotton sector in 1966 (2,000) and this has since been further eroded by mill closures. The declining employment in both cotton and woollen and worsted manufacturing reflects industry-wide trends. But the expansion of the carpet industry, located in Halifax and Brighouse, is welcome evidence of a growth sector in the local textiles industry. It is also interesting to note that the declining sectors lost more women than men, but the carpet firms increased - mainly men.

43. Engineering, the second largest manufacturing order, showed little overall change in employment over the period. This contrasted with the regional position and even more with the national one where substantial increases took place. Machine Tools, the largest group within the

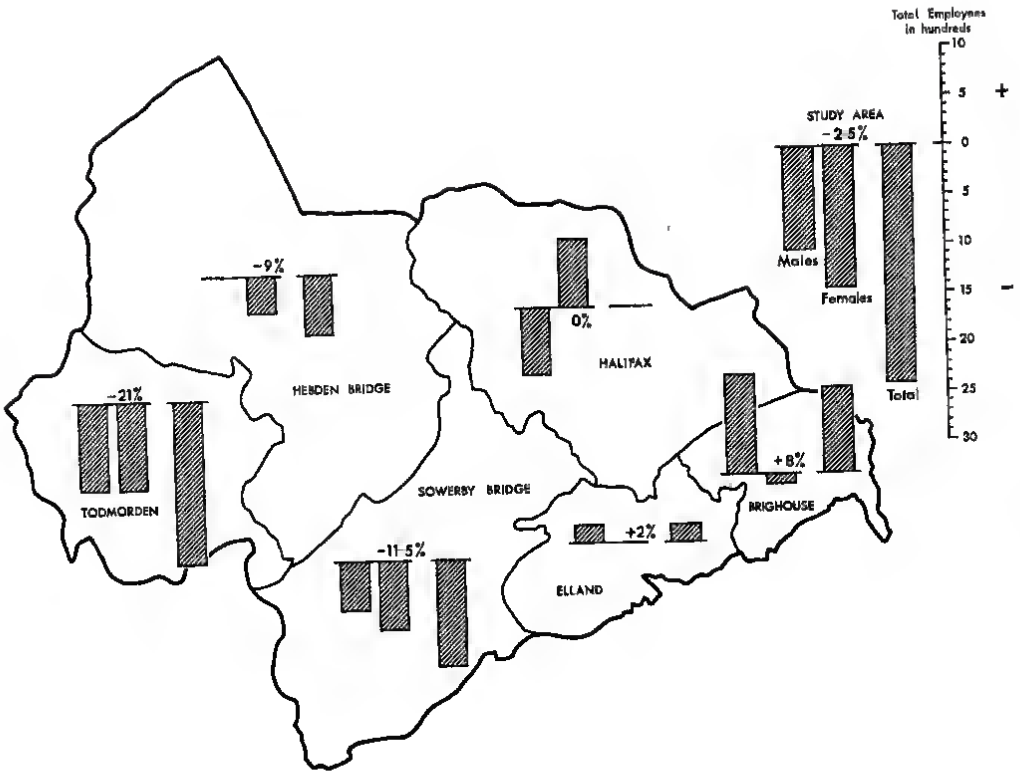


**Fig.9. CHANGES IN MALE, FEMALE AND TOTAL EMPLOYEES 1953 - 1966 BY EMPLOYMENT EXCHANGE AREAS**

The heights of the columns are proportional to the net gain or loss over the period. Percentage change in total employees is given in figures.

order, increased its employment only marginally to 4,300. Domestic electrical equipment and small tools expanded substantially but these increases were offset by a decline in industrial plant and steelwork whilst a factory producing telegraph and telephone apparatus and employing some 400 workers in Halifax closed down in 1959 and production was transferred out of the area. Food, Drink and Tobacco - which, in the study area, is accounted for principally by confectionery and biscuits - increased its employment significantly. The gain was almost entirely in jobs for females. Clothing and Footwear declined somewhat in employment and thus followed the national trend. Metal Goods expanded by 300 - entirely female employment. In the remainder of the manufacturing sector, which is small and diverse, an overall employment growth of 600 took place, consisting mainly of male jobs. Significant components of this were increases in Orders XIII (Bricks, pottery and glass) and XIV (Timber etc.).

44. Employment in the service industries as a whole increased but at less than half the regional and national rates. Most of the industries increased but Distributive Trades declined, in marked contrast to the increases regionally and nationally. Transport and communications declined at a faster rate than regionally and nationally. Overall the services industries gained 1,400 employees between 1959 and 1966.

TABLE 10. EMPLOYEES BY INDUSTRY IN 1966 AND COMPARISON WITH GREAT BRITAIN

| Order | Industry | Total Employment | Percentage of Total employment | Percentage of Total employment Great Britain |
|---|---|---|---|---|
| I & II | Primary Industries (sub-total) | 1,300 | 1 | 4 |
| III | Food, Drink & Tobacco | 5,900 | 6 | 3 |
| VI | Engineering and Electrical Goods | 11,400 | 12 | 10 |
| IX | Metal Goods not elsewhere specified | 4,000 | 4 | 3 |
| X | Textiles | 27,500 | 30 | 3 |
| XII | Clothing | 4,100 | 4 | 2 |
| Etc. | All other Manufacturing Industries | 8,000 | 9 | 17 |
| III - XVI | Manufacturing Industries (sub-total) | 60,900 | 65 | 38 |
| XVII | Construction (sub-total) | 3,900 | 4 | 7 |
| XIX | Transport and Communications | 2,500 | 3 | 7 |
| XX | Distributive Trades | 6,300 | 7 | 13 |
| XXII | Professional and Scientific Services | 7,500 | 8 | 11 |
| XXIII | Miscellaneous Services | 5,000 | 5 | 9 |
| XXIV | Public Administration and Defence | 2,800 | 3 | 6 |
| XVIII & XXI | All other service industries | 2,800 | 3 | 5 |
| XVIII - XXIV | Service Industries (sub-total) | 26,900 | 29 | 51 |
| | Grand Total | 93,000 | 100 | 100 |

Note: figures for the study area could not be prepared on quite the same basis as the nation estimates (see Appendix D) and so are not strictly comparable.

TABLE 11. CHANGES IN EMPLOYMENT BY INDUSTRIES 1959-1966

| Order No. | Industry | Estimated employment (hundreds) | | | Percentage change 1959-1966 | | |
|---|---|---|---|---|---|---|---|
| | | 1959 | 1966 | Change | Study Area | Yorkshire and Humberside | Great Britain |
| I & II | Primary Industries ..... | 1,4 | 1,3 | - 1 | - 7 | - 22 | - 29 |
| III - XVI | Manufaoturing Industries ..... | 62,5 | 60,9 | - 1,6 | - 3 | + 4 | + 6 |
| XVII | Construction ..... | 3,6 | 3,9 | + 3 | + 8 | + 31 | + 20 |
| XVIII - XXIV | Service Industries ..... | 25,5 | 26,9 | + 1,4 | + 5 | + 11 | + 12 |
| | GRAND TOTAL ..... | 93,0 | 93,0 | - | 0 | + 6 | + 8 |
| | Manufacturing Industries:- | | | | | | |
| X | Textiles ..... | 30,8 | 27,5 | - 3,3 | - 11 | - 10 | - 11 |
| VI | Engineering and Eleotrical Goods ..... | 11,2 | 11,4 | + 2 | + 2 | + 11* | + 20* |
| III | Food, Drink and Tobacco ..... | 5,1 | 5,9 | + 8 | + 16 | + 6 | + 3 |
| XII | Clothing and Footwear ..... | 4,2 | 4,1 | - 1 | - 2 | - 5 | - 5 |
| IX | Metal Goods not elsewhere specified ..... | 3,7 | 4,0 | + 3 | + 8 | * | * |
| etc. | All other manufacturing industries ..... | 7,5 | 8,0 | + 5 | + 7 | + 8 | + 3 |
| III - XVI | Sub-total, Manufacturing Industries ..... | 62,5 | 60,9 | - 1,6 | - 3 | + 4 | + 6 |

Notes: (i) Because figures for the study area are not strictly comparable with regional and national estimates (see Appendix D) the small deficiencies in percentage changes in Textiles and all other manufacturing industries should be treated with caution.
(ii)* For the regional and national percentages, Order IX is combined with Order VI.
(iii) Figures are rounded to the nearest hundred and do not therefore add up in all cases to the totals shown.

## INDUSTRIAL STRUCTURE

45. There are a number of structural aspects of industry which deserve examination on account of their effect, or possible effect, on the economic potential of the study area:-

(a) size of establishment (by employment);

(b) the number of establishments which are either headquarters or branches;

(c) linkages between establishments.

## SIZE OF ESTABLISHMENT

46. Information available about the size of establishments in manufacturing industries (as measured by employment) is summarised in Table 12. Firms employing fewer than 11 workers are exoluded and therefore the total number of establishments is substantially understated. It will be seen from col. (7) that establishments employing over 250 dominate the Food, Drink and Tobacco industry, accounting for 78% of employment; that the Textiles and Engineering industries have a variety of sizes of establishments; and that the remaining manufacturing industries are characterised by a generally very small size of establishment. Overall, in 1966, some 39% of manufacturing employees worked in establishments employing over 250. This compares with a national average of 58% (1961).

## HEADQUARTERS AND BRANCHES

47. In the industrial survey information was collected on the status of establishments - i.e. whether they were branoh establishments, headquarters with branches elsewhere, or the only establishment of a firm without branches. All branches have their headquarters located outside the study area, except in one case. The information is set out in Appendix C. A significant proportion of firms in the following industries were branches:-

Textiles (in three cases out of seven the headquarters were in other parts of the West Yorkshire industrial area);

Food, Drink and Tobacco;

Other manufacturing industries.

There was also a significant tendency for the branches to be larger, accounting for 35% of the establishments over 250 and only 14% of the smaller establishments. Headquarters firms also tended to be larger, leaving independent establishments aocounting for a high proportion of the smaller firms. The Engineering and Clothing and Footwear orders consisted predominantly of independent units, with only 3 branches out of 28 establishments.

TABLE 12. SIZE OF ESTABLISHMENT IN MANUFACTURING INDUSTRIES, 1966

| Order No. | Industry | Estimated Insured Employees 1966 ('000) | Employment in all Establishments covered 1966 ('000) | No. of establishments by size (Total employed) | | | | Employment in establishments of 251 and more as percentage of estimated insured employees col.(1) |
|---|---|---|---|---|---|---|---|---|
| | | | | 11-100 Employees | 101-500 | 501 and more | Total establishments with more than eleven employees | |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| X | Textiles | 27.5 | 25.4 | 123 | 68 | 5 | 196 | 41% |
| VI | Engineering etc. | 11.4 | 11.1 | 69 | 26 | 3 | 98 | 50% |
| III | Food etc. | 5.9 | 5.3 | 23 | 3 | 3 | 29 | 78% |
| XII | Clothing etc. | 4.1 | 3.7 | 36 | 12 | 0 | 48 | 11% |
| IX | Metal Goods (N.E.S.) | 4.0 | 3.8 | 52 | 11 | 0 | 63 | 8% |
| etc. | All other manufacturing Industries | 8.1 | 7.3 | 111 | 16 | 1 | 128 | |
| III-XVI | Total | 60.9 | 56.6 | 414 | 136 | 12 | 562 | 39% |
| III-XVI | Total - Great Britain 1961 | 8,867 | 8,178 | 40,049 | 12,213 | 2,899 | 55,161 | 58% |

## LINKAGES BETWEEN ESTABLISHMENTS

48. Functional linkages between establishments in a particular locality are significant because they indicate that the future potential of linked establishments should be seen together rather than separately. Where functional linkages are well developed, it is necessary to recognise that the individual establishment is part of an industrial complex and benefits from the economies of scale that this provides.

49. The localisation of the wool textile industry in West Yorkshire is an example of the industrial complex par excellence. Firms in the study area benefit from a wide range of local linkages - e.g. raw material supplies, dyeing and finishing firms, textile machinery manufacturers and the specialised services available in Bradford. All these were specifically mentioned by wool textile firms in response to an "open-ended" question on the advantages of being located in the study area. Similar advantages were acknowledged by cotton firms in their proximity to Lancashire. In all, 15 firms in the textile industry specifically mentioned linkages with other local establishments in answer to this question.

50. The engineering industry in the study area also benefits from local linkages. Foundries and suppliers of components were mentioned specifically by 7 firms who found such linkage an advantage. In view of the importance of the engineering industry to the local economy and the predominance of independent firms of small or moderate size, research throwing light on the problems and potential for growth of the local complex of engineering and metal industries would be useful.

51. Detailed information was obtained in the industrial survey concerning the importance attached to one particularly significant aspect of linkage - the local availability of technological services. These were grouped broadly into two categories:-

(i) technical information and advice;

(ii) research and development facilities.

Of all firms answering this question, 40 per cent considered it important that technical information and advice should be available locally; and 37 per cent thought local research and development facilities were important. Analysing the results by industry, firms in the textiles, engineering (other than machine tools) and clothing industries attached rather more importance to this than other industries. Breaking down the answers by size of firms, it was the firms employing less than 100 who attached the greater importance. The answers to a question as to the adequacy of local technological services showed that dissatisfaction was confined to firms employing less than 250. The 13 firms larger than this were all satisfied, probably because in most cases they were able to provide their own facilities. Analysis by industry shows that the 9 dissatisfied firms were spread over a wide range of industries, including engineering other than machine tools (2), clothing (2), and miscellaneous textile trades (2). The remaining 15 firms in the textile industry were satisfied with the local services.

## THE PRESENT EMPLOYMENT SITUATION

52. The value of a study of current trends in the relationship between demand and supply in the local labour market lies in the help it gives in interpreting the overall trends in employment already described and in identifying any imbalance which might act as a brake on economic growth. There is a variety of information available for this analysis, and the following aspects are examined here:-

Unemployment

Employment vacancies

Activity rates

Female part-time employment

Long journeys between home and workplace

The experience of employers in recruiting labour.

### UNEMPLOYMENT

53. Unemployment trends from 1957-67 are shown in Fig. 10 and Table 13. The data show quite clearly that the rate of unemployment in the study area has been consistently lower than that for either the region or the country as a whole. Over the period, the annual average rate of unemployment never exceeded the 1.9% recorded in 1958 and for six years was less than 1%. Since 1960, the differentials between the rates for the study area and both the region and Great Britain have widened. Even during 1967 unemployment remained low compared with the regional and national rates despite a substantial number of redundancies, partly due to closures of firms in the area. Male unemployment has been particularly low. Female unemployment has also been generally low, but due mainly to short-time working in the textile industry it exceeded both regional and national levels in 1958 and the regional level in 1959 and 1962. Analysis of the age structure of the unemployed (Table 14) shows that particularly for women there was a relatively high proportion in the older age groups, more pronounced than in the region or the country as a whole. Bearing in mind the low rate of unemployment, this suggests that there is practically no unemployment amongst younger women, and that the availability of female labour is particularly difficult.

TABLE 13. PERCENTAGE UNEMPLOYMENT (ANNUAL AVERAGES) 1957-67

| Year | Study Area | Yorkshire and Humberside | Great Britain |
|---|---|---|---|
| 1957 | 0.6 | 1.0 | 1.4 |
| 1958 | 1.9 | 1.9 | 2.1 |
| 1959 | 1.6 | 1.9 | 2.2 |
| 1960 | 1.0 | 1.2 | 1.6 |
| 1961 | 0.7 | 1.0 | 1.5 |
| 1962 | 1.4 | 1.7 | 2.0 |
| 1963 | 1.6 | 2.0 | 2.5 |
| 1964 | 0.8 | 1.3 | 1.6 |
| 1965 | 0.6 | 1.1 | 1.4 |
| 1966 | 0.5 | 1.2 | 1.5 |
| 1967 | 1.1 | 2.1 | 2.4 |

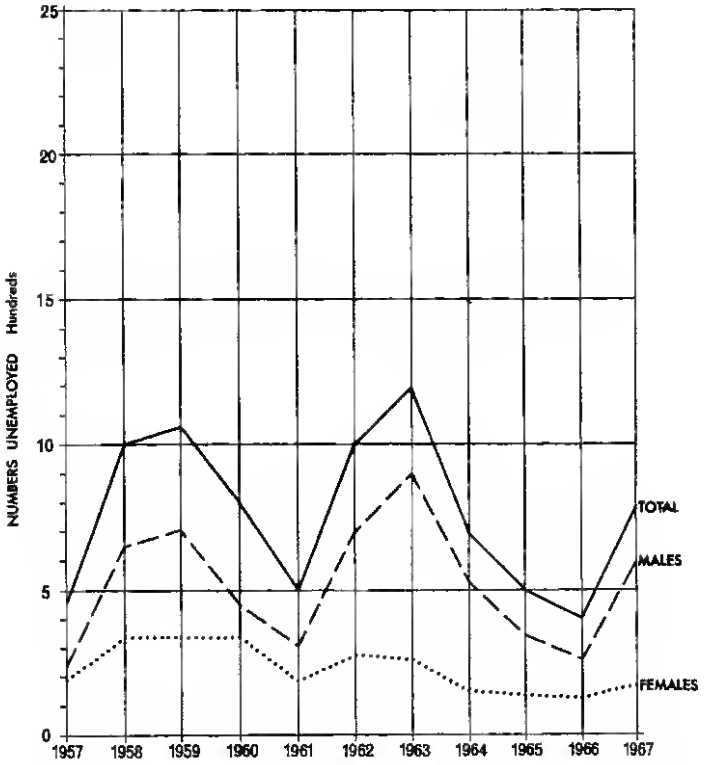


**Fig.10. NUMBERS OF WHOLLY UNEMPLOYED FOR MALES, FEMALES AND TOTAL IN THE STUDY AREA 1957 - 1967**

The annual average of the monthly figures of registered wholly unemployed is plotted for the years 1957-1967.

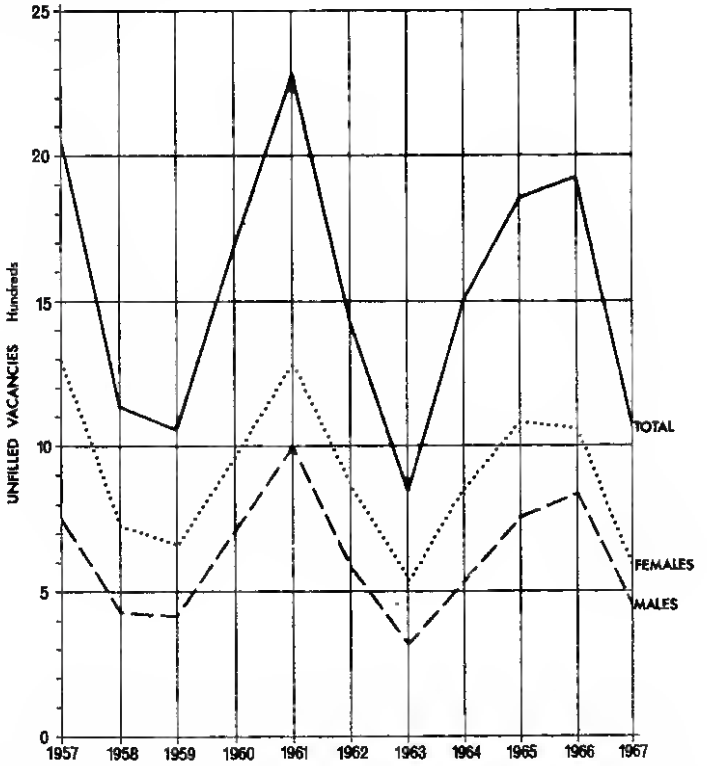


**Fig.11. NUMBERS OF UNFILLED VACANCIES FOR MALES, FEMALES AND TOTAL IN THE STUDY AREA 1957 - 1967**

The annual average of monthly figures of unfilled vacancies notified to Employment Exchanges is plotted for the years 1957-1967.

TABLE 14. UNEMPLOYMENT BY AGE (AVERAGE FOR THE MONTH OF JANUARY: 1964-7: PERCENTAGES)

| Area | Malee | | | Females | | |
|---|---|---|---|---|---|---|
| | Under 20 | 20 & under 40 | 40 & over | Under 20 | 20 & under 40 | 40 & over |
| Study Area | 6 | 41 | 53 | 18 | 29 | 53 |
| Yorkshire & Humberside | 9 | 39 | 52 | 26 | 38 | 36 |
| Great Britain | 10 | 39 | 51 | 22 | 43 | 35 |

Note: Figures are available for January and June of each year. Those for January have been selected because early school holidays in the study area produce an abnormally high number of unemployed young persons in June. This is a purely short term phenomenon.

EMPLOYMENT VACANCIES

54. The number of vacancies notified by employers to the Ministry of Labour naturally tends to vary inversely with the number unemployed. This is clearly brought out in Fig. 11 with its troughs in 1959 and 1963; yeare when unemployment was at a peak (c.t. Fig. 10). The total of unfilled vacancies exceeds the total unemployed in all but three of the eleven years 1957-67. This contrasts with the national position in which the average number of unemployed has usually exceeded the average number of vacancies. Within this overall picture there was a marked contrast between the demand for men and women. The number of vacancies for females was higher than the number of wholly unemployed females in each of the eleven years and was usually considerably higher. On the other hand, the number of male vacancies was higher than the number of unemployed males in only seven of the eleven years, and then usually to a less striking degree. This suggests that overall the unsatisfied demand for female workere was greater than for males. It is important to note that a large proportion of notified vacancies require particular skills or aptitudes; in 1967 only 17% of male vacancies and 9% of female vacanoies were for oompletely unskilled workers.

ACTIVITY RATES

55. The level of eoonomic activity of the adult population of an area is a useful measure of the pressure of the demand for labour. Activity rates relate estimates of employees in an area to the home population, although for small areas they are a less accurate measure beoause of effects of travel to work and differences in the numbere of self-employed. However, since numbers travelling in and out of the study area are small we may accept the estimates in Table 15 which indioate that levels of activity in the area are significantly higher than in either the region or Great Britain.

TABLE 15. ACTIVITY RATES: ESTIMATED PERCENTAGES OF THE POPULATION AGED 15 AND OVER IN EMPLOYMENT 1959, 63, 66

| | 1959 | 1963 | 1966 |
|---|---|---|---|
| Males | | | |
| Study Area | 82.6 | 84.1 | 82.3 |
| Yorkshire and Humberside | 79.2 | 79.4 | 78.3 |
| Great Britain | 77.4 | 77.3 | 76.3 |
| Females | | | |
| Study Area | 45.8 | 45.5 | 47.8 |
| Yorkshire and Humberside | 36.8 | 38.3 | 39.9 |
| Great Britain | 37.3 | 39.1 | 40.5 |

FEMALE PART-TIME EMPLOYMENT

56. In areas where the labour market is fully stretched, it is most likely that maximum use will be made of part-time labour. Reserves of part-time labour are predominantly on the female side and in the industrial questionnaire, the enquiry was limited to the availability of part-time work for women. Of the 97 firms responding, 58 offered women opportunities for part-time work. Even in the predominantly male-employing engineering industry, 9 of the 21 firms employed part-timers. In textiles, 24 out of 34 firms offered similar opportunities. Of these, 19 offered extremely flexible arrangements and were willing to fix hours by agreement with the individual. All 7 firms in the clothing industry employed part-timers, as did 5 out of 8 food firms. The arrangements offered may be classified as follows:-

(1) hours by arrangement (40 firms)

(2) short day (9 a.m. - 4 p.m.) (24 firms)

(3) morning shift (19 firms)

(4) afternoon shift (17 firms)

(5) evening shift (14 firms)

This information suggests that industrialists in the area have made considerable efforts to enlist part-timers. This adds to the evidence of an excess demand for female labour.

RECRUITMENT FROM OUTSIDE THE STUDY AREA

57. Further evidence on the state of the labour market is provided by the pattern of journeys between home and workplace, with special reference to particularly long journeys to or from places outside the study area. In Chapter 1 (para. 2), the generally small amount of daily movement over the study area boundary was noted. The movements brought to light by the 1961 Census include very few over any great distance. The principal one involving a substantial number was between the study area and Leeds C.B. But this was a two-way movement of

some 420 outwards from the study area and 240 inwards. This net movement to work in Leeds cannot be held to be significant in this context, bearing in mind the variety of job opportunities to be found there.

58. On the other hand, some very significant information is available on long distance journeys by women working in the study area. These are not fully reflected in the published Census data because a number of small local authority areas are involved, whereas the published results include only movements of about 50 or more between pairs of local authority areas. Nevertheless, a movement of some 220 women from local authority areas in the coalfield (Adwick-le-Street U.D., Hemsworth U.D. and R.D.) to Halifax and Elland is recorded.

59. Information about workers travelling by special transport organised by employers shows that in June 1967, 470 women living in the Yorkshire Coalfield area were travelling into the study area. 410 went to Halifax and 60 to Elland. The industries organising this movement were the food industry (260) and worsted manufacture (210). This is good evidence of a severe shortage of women workers; the distances covered are long, there is a tendency to a high rate of turnover among the workers and the cost to the employer of providing the transport is substantial. More women undertake these journeys in the summer months, but even in December 1966 the total movement was over 400. In addition, women part-time workers (evening shift) were brought from Huddersfield to Halifax in special transport and buses have been used to bring in women workers from Lancashire to the Todmorden and Hebden Bridge areas. This is entirely a one-way movement - there is to our knowledge no transport organised by employers outside the study area taking residents elsewhere.

## THE EXPERIENCE OF EMPLOYERS IN RECRUITING LABOUR

60. So far in this discussion of the state of the labour market, the only qualitative data used have related to male and female labour and female part-time labour. In the industrial survey, questions were asked about the breakdown of the present labour force by broad occupational groups and the employers' experience in recruiting for each group. Employers were asked to assess their experience over the last two years in recruiting full-time labour in each of these grades and for school-leavers. The following scale of difficulty was used:-

Difficult
Satisfactory
Easy
Little or no recent experience.

The results are summarised in Table 16. Very few employers assessed their experience in recruiting any grade of labour as "easy". The data are therefore presented in the form of percentages of those employers with recent experience of recruitment who considered recruitment "difficult". The information is of interest mainly on account of the variations in experience as between one grade of labour and another: we have no national or regional data with which to compare the local situation.

61. As regards males, the difficulty in recruiting skilled labour and management, supervisory, technical and scientific workers comes out clearly. The engineering industry found the position particularly difficult. School leavers were certainly not regarded as easy to recruit; again, the engineering firms experienced particular difficulty in this respect. As regards females, recruitment of semi-skilled workers was considerably more difficult than of "others". These two grades account for four-fifths of full-time female labour in manufacturing industries; few women's jobs are classified as "skilled".

62. An interesting feature of the results is the marked variation in the experience of different sizes of firms. The larger firms found less difficulty than the smaller in recruiting skilled male labour. But in the less skilled grades - other workers and clerical and office staff - the larger firms found it more difficult than the smaller to recruit either males or females. One possible explanation of this is that whereas skilled men are attracted to the larger firms with their generally better prospects and conditions, the unskilled prefer the small local firm, so avoiding expenditure on transport to work. The factor of convenience of workplace to the home is likely to be particularly important to married women workers; a consideration of which local employers are very conscious.

63. An analysis has been carried out of the variations in the experience of employers according to their location within the study area. No significant variations are apparent except for a markedly high level of difficulty experienced by the 6 employers in the Hebden Bridge Employment Exchange area who responded to the questions. In addition to the data shown in Table 16 it is interesting to note that 38 per cent of firms with experience in recruiting part-time female labour found difficulty, i.e. a higher proportion than for unskilled full-time female labour. Again, this supports the conclusion that for this type of labour, resources have been very fully explored by employers.

64. Employers were asked whether they considered that conditions in the local labour market had changed significantly over the previous ten years. The 95 firms responding assessed the position as follows:-

| | |
|---|---|
| More difficult: | 52 |
| No change: | 30 |
| Easier: | 13 |

It would appear that the situation has become somewhat tighter over the last 10 years, particularly in the engineering industry. Of the 20 respondents from this industry, 15 considered the position "more difficult", 5 recorded "no change", and none considered it "easier".

65. Finally, another indication of the extent of the difficulty in recruiting female workers is the result of a special campaign mounted in Halifax to assess the extent of labour reserves of married women in the town. These proved to be negligible - poster displays, press publicity and the distribution of 3,000 leaflets led to only 100 enquiries and 17 women placed in employment.

TABLE 16. EXPERIENCE OF MANUFACTURING EMPLOYERS IN RECRUITING LABOUR

(a) Males

| Type of Establishment | Percentage of firms with recent experience of recruitment of the following broad categories of labour who considered recruitment "difficult":- | | | | | |
|---|---|---|---|---|---|---|
| | Manage-ment etc. | Clerical and Office Staff | Skilled | Semi-Skilled | Other Workers | School Leavers for any grade |
| All establishments | 62 | 37 | 70 | 54 | 34 | 56 |
| Establishments in principal industries:- | | | | | | |
| (i) Textiles | 52 | 45 | 58 | 44 | 38 | 55 |
| (ii) Engineering etc. | 78 | 30 | 85 | 60 | 21 | 72 |
| Establishments by numbers employed:- | | | | | | |
| 0-99 | 53 | 37 | 81 | 68 | 22 | 63 |
| 100-249 | 70 | 17 | 69 | 53 | 39 | 33 |
| 250-499 | 63 | 60 | 64 | 50 | 35 | 73 |
| 500 and more | 67 | 42 | 58 | 40 | 67 | 42 |

(b) Females

| | | | | | | |
|---|---|---|---|---|---|---|
| All establishments | 54 | 40 | 48 | 50 | 24 | 42 |
| Establishments in principal industries:- | | | | | | |
| Textiles | 58 | 44 | 20 | 45 | 29 | 52 |
| Establishments by numbers employed:- | | | | | | |
| 0-99 | * | 30 | * | 46 | 11 | 43 |
| 100-249 | * | 25 | * | 58 | 18 | 35 |
| 250-499 | * | 46 | * | 50 | 43 | 44 |
| 500 and more | * | 58 | * | * | 33 | 43 |

* In these cases there were less then ten replies and the percentage is not reproduced.

## A PARADOX

66. In Chapter 2, it was shown that in the period 1961-66 there was a substantial loss of population by net migration including many of working age, particularly women. This would appear wholly inconsistent with the evidence already put forward about low unemployment rates, high level of employment vacancies, high activity rates, considerable female part-time employment, recruitment from outside the study area and the difficulties of employers in recruiting labour. These measurements suggest a serious labour shortage of both men and women (although particularly amongst the latter). Normally, one would expect a net inward flow of migrants - as experienced in the Midlands and South in recent years - certainly not a serious net loss. This paradox can only be explained in terms of:-

(i) a failure on the part of industry to offer sufficiently high incomes (wages and earnings) or additional benefits such as good working conditions, training facilities and/or

(ii) some deficiency outside the immediate control of employers which nevertheless adversely affects the attractiveness of living and working in the area (e.g. bad environmental conditions and the lack of prospects arising from the small size of labour catchments and from industrial specialisation).

It is clearly important to examine these possibilities, because the explanation of the paradox should throw light on the causes of the economic ills of the area. The following questions are examined now:-

Wages and earnings

Job stability and prospects

Training facilities.

The other items mentioned in (i) and (ii) above, working conditions and aspects of environment outside the factory - are the subject of Chapter 4. An overall assessment of the results and their implications is given in Chapter 6.

## WAGES AND EARNINGS

67. No information is available about wages and earnings in the study area. The best that can be done to obtain some idea of the relationship of local male earnings in manufacturing with those in the region is to use regional figures of average weekly earnings of adult male manual workers in individual industries. The assumptions have to be made that in each industry the local level of earnings is the same as the regional and earnings of non-manual workers bear the same relationship to the regional mean as those of manual workers.

68. Table 17 shows for 1966 the proportion of males in higher paid and lower paid manufacturing industries using as a standard the regional average earnings for the group. 81% of males in manufacturing in the study area were in lower paid industries compared with 58% in the region. Conversely only 19% of males in the study area were in higher paid industries compared with 42% in the region. This suggests that earnings in the study area were lower than in the region, which is particularly significant because the regional mean (389s. 11d. per week) was itself well below the national (415s. 6d.).

TABLE 17. MALE EMPLOYMENT IN MANUFACTURING INDUSTRIES CLASSIFIED ACCORDING TO AVERAGE EARNINGS, 1966

| Males employed in manufacturing industries where the average earnings for male manual workers are:- | Proportion (percentage) | |
|---|---|---|
| | Study Area | Yorkshire and Humberside |
| (a) above the regional average: | | |
| 40/- or more above | - | 1 |
| 30/- or more above but less than 40/- | 2 | 4 |
| 20/- " " " " " " 30/- | 4 | 5 |
| 10/- " " " " " " 20/- | 12 | 25 |
| Less than 10/- above | 1 | 7 |
| Total: | 19 | 42 |
| (b) below the regional average: | | |
| Less than 10/- below | 29 | 28 |
| 10/- or more below but less than 20/- | 9 | 11 |
| 20/- " " " " " " 30/- | 40 | 16 |
| 30/- " " " " " " 40/- | - | - |
| 40/- or more below | 3 | 3 |
| Total: | 81 | 58 |

TABLE 18. AVERAGE EARNINGS IN SELECTED INDUSTRIES IN THE UNITED KINGDOM: OCTOBER 1966 (SECOND PAY WEEK)

| | Woollen and Worsted | | Engineering and Electrical Goods | | All Manufacturing Industries | |
|---|---|---|---|---|---|---|
| | Earnings (s.d.) | Index (All mf.= 100) | Earnings (s.d.) | Index | Earnings (s.d.) | Index |
| Men (21 and over) | 358/1 | 86 | 411/8 | 99 | 415/6 | 100 |
| Youths and Boys | 198/3 | 103 | 175/9 | 91 | 192/5 | 100 |
| Women (full time) | 191/9 | 95 | 208/8 | 104 | 201/3 | 100 |
| Women (part time) | 97/1 | 90 | 112/11 | 104 | 108/5 | 100 |
| Girls (under 18) | 146/9 | 107 | 134/0 | 98 | 136/6 | 100 |

69. Information about average weekly earnings of female workers by industry is only available for the country as a whole and national figures for the two principal manufacturing industries in the study area are given in Table 18. It has to be assumed that the local level of earnings in these industries is the same as the national and that non-manual workers' earnings bear the same relationship to the national mean as do manual. The table shows that in woollen and worsted, earnings of women were below and of men well below the average for all manufacturing industries. Earnings of young people were above the mean, probably because the length of training is comparatively short. Earnings in engineering and electrical goods were much nearer to the average for all manufacturing, but in this industry there is a regional differential which shows Yorkshire and Humberside at a considerable disadvantage. In October 1966, average earnings of men manual workers aged 21 and over in the industry, were equivalent to only 94% of the United Kingdom average.

## JOB STABILITY AND PROSPECTS

70. The prospect of prolonged unemployment is normally remote. The normal processes of industrial change, involving re-organisation and closures of some establishments as well as the growth of others, necessarily involves the movement of labour from one job to another. However, this has very rarely involved unemployment for any length of time. In the past, the cotton and wool textile industries have been subject to occasional recessions which have entailed short-time working. This, along with gradual decline in the total numbers employed has played a part in creating a feeling of uncertainty among employees about the future. Uncertainty also manifests itself in a tendency to look for a job elsewhere when news (or even rumour) is circulated of a take-over or other form of re-organisation. So although there has been very little unemployment, a certain feeling of uncertainty has nevertheless been in evidence.

71. As regards the prospects of advancement and promotion, it was shown in Chapter 2 (Table 7) that the proportion of male managerial and professional jobs in the area is equal to that in the country as a whole. Indeed, taking managerial jobs alone, the proportion was higher. This suggests good promotion prospects. But in the small independent firm, particularly the family firm, the prospects of the ambitious employee may be limited. So far as salary prospects are concerned, the limited evidence available suggests that levels in textiles, clothing and engineering follow those in West Yorkshire as a whole. In engineering, levels are lower than in some other parts of the country e.g. the Midlands and London. In textiles and clothing levels are comparable with the same industries in other parts of the country, but the industries themselves (except carpet manufacture) tend to be relatively lowly-paid. Recruitment of managers in most industries tends to be local.

72. Another possible limitation on prospects has also been mentioned earlier in this report. This is the small size of the labour catchments in the area, a factor which automatically limits the range and choice of jobs available to the individual. The high degree of specialisation in the local economy also has its effect. If the individual is not interested in any of the jobs created by the few dominant local manufacturing industries or by the restricted range of service industries, he must look elsewhere. On the other hand, if he is interested in textiles or machine tools the fact that they are heavily localised in the study area gives better prospects (other things being equal) than there would be otherwise.

## TRAINING FACILITIES

73. Another possible explanation of the paradox of persistent labour shortage being accompanied by persistent net loss by migration is a failure to train local labour for the jobs which are available. This is certainly not the case in the study area. In the engineering industry in Halifax, with its specialisation in machine tools, apprentice training (both craft and technician) is well organised. Several firms have their own training schools and smaller firms are mainly in the E.I.G.A. (Engineering Industry Group Apprenticeship) scheme. The position in the engineering industry elsewhere in the area is almost as good, some firms having their own training schools and others using the group apprenticeship schemes. Technical colleges at Halifax and Todmorden run courses for apprentices. In the wool industry, a number of firms have had operator training schemes for some years - for spinning, weaving and mending. There are also facilities for craft apprentice training on the job and this is usually linked with day release courses. Some employers use training facilities which are available in Bradford. All three major carpet companies have training facilities. In the food industry, the majority of employees are on unskilled work and the training needs are small and specialised and it is not always easy to make provision for these. In a number of industries, firms are able to use facilities in other nearby towns. In this respect, the fact that there are large urban centres within easy reach of the study area is a considerable advantage. Commercial training facilities at Further Education centres in the area are good and training for the professions is available in the larger centres in the vicinity.

74. Taken overall, opportunities in Halifax compare very favourably with other parts of the country and although opportunities in the remainder of the area are more limited, they nevertheless compare well with similar areas. Further improvement of facilities may be expected as the Industrial Training Boards become increasingly effective.

## THE FUTURE EMPLOYMENT SITUATION

75. We conclude the chapter by discussing the outlook for the labour market in the years to 1971. We are concerned particularly with assessing the effect of factors which can be foreseen with some confidence, whether or not they are already in evidence as trends. Forward estimates have been made using a number of assumptions about such matters as population and migration changes, activity rates, the level of demand for labour and journey to work habits, and they are therefore subject to a considerable margin of error. An outline of the methods used in making estimates and of the difficulties involved is given in Appendix E.

### SUPPLY OF LABOUR

76. If outward migration ceased and the area retained its natural population increase up to 1971, there would not be a proportionate increase in the number of people available for work in the area, due to the high average age of the population. There would in fact be only a small increase in effective labour supply of 600. On the other hand if outward migration continues at past levels - as seems most probable - there will be a decrease of between 4,300 and 5,200 in effective labour supply (see Appendix E, Table E1). This will be made up of decreases of between 1,500 and 2,100 males and between 2,800 and 3,100 females.

## DEMAND FOR LABOUR

77. Between 1959 and 1966 total employment in the area remained unchanged with decreases in manufacturing (1,600) and primary industries (100) offset by increases in service industries (1,400) and construction (300). Between 1966 and 1971 it is estimated that there will be a change in total demand of between + 100 and - 1,900 jobs (see Appendix E, Table E2). A range of change for males is forecast of between + 1,200 and nil jobs; and for females of between - 1,100 and - 1,900 jobs. The substantial contraction of employment in textiles in the study area is expected to continue, probably at a greater pace than over the period 1959-66. This is likely to affect demand for female workers more than males. A number of other industries including clothing and distributive trades are expected to show small decreases in employment. Increases are expected in a number of industries including food processing, engineering, electrical and metal goods, construction, professional and scientific services and miscellaneous services, but it seems likely that these will be insufficient to prevent an overall decrease in demand for labour.

## MANPOWER BUDGET FOR 1971

78. Table 19 brings together forecasts of the effective supply of and demand for labour in 1971. This shows that if outward migration continues at the forecast rate there will be a surplus of between 2,900 and 4,900 jobs in 1971, 1,800-3,000 for males and 1,100-1,900 for females. Thus although the current shortage of workers of both sexes will probably continue, the figures suggest that the shortage of males in 1971 will be greater than the shortage of females, a reversal of the current situation. However, the easing of demand for females is mainly due to the predicted decline in employment in textiles and a high proportion of women expected to be released by textile manufacturers will be in higher age groups. Although they will be generally below retiring age, any assumption that they will be available for other work elsewhere may not be valid. If migration were to cease altogether there would be a shortage of jobs for both males and females. This is most unlikely to happen since a shortage of jobs tends to stimulate outward migration and to reduce activity rates thereby reducing the supply of labour. In any case it is unrealistic to expect that net outward migration would cease in such a short period.

TABLE 19. MANPOWER BUDGET

Thousands

| | With migration | | | Without migration | | |
|---|---|---|---|---|---|---|
| | Males | Females | Total | Males | Females | Total |
| Labour demand | 58.0 to 59.2 | 37.2 to 38.0 | 95.2 to 97.2 | 58.0 to 59.2 | 37.2 to 38.0 | 95.2 to 97.2 |
| Effective labour supply | 55.9 to 56.5 | 36.0 to 36.3 | 91.9 to 92.8 | 59.4 | 38.3 | 97.7 |
| Likely range of surplus or shortage of jobs | + 1.8 to + 3.0 | + 1.1 to + 1.9 | + 2.9 to + 4.9 | - 1.4 to - 0.2 | - 1.1 to - 0.3 | - 2.5 to - 0.5 |
| Average net surplus or shortage of jobs | + 2.4 | + 1.5 | + 3.9 | - 0.8 | - 0.7 | - 1.5 |

79. The general conclusion which emerges is that there is likely to be a decline in demand for male and to a greater extent for female labour, but that supply is also likely to fall due to continued outward migration and the increasing age of the population. There will continue to be a shortage of workers of both sexes, but it may be greater in the case of males than females.

## 4. BUILDINGS AND ENVIRONMENT

80. In the context of this study the quality of the environment is significant in a number of ways. First, it affects the general attractiveness of the area as a place in which to live and work. Any factor which has the effect of either attracting or repelling workers is clearly of considerable economic significance. Secondly there is the possibility of the general environment of the area having an effect upon the attitudes of those making decisions of economic importance to the area - either by way of investment (setting up a factory or financing a development scheme) or carrying on business with firms in the area (willingness to visit the area on business). Thirdly, there is the possible effect of environment upon health. Lastly, and by no means least, there is the point that over and above these other considerations, the environment of an area is an important element in the quality of life of its population.

81. In discussing the quality of the environment of the study area, the factors are mainly physical, but not wholly so. The availability and quality of particular services is an important aspect. The discussion is under the following heads:-

Climate
Pollution
Dereliction
Landscape and recreation
The Building stock: Housing
" " " Industrial Buildings
" " " General
Public Utilities
Education Services
Health Services
Environment and Health

### CLIMATE

82. There is unfortunately no comprehensive information on the climate of the study area as it does not include any principal or full-reporting meteorological stations. Some information on temperature is available for Halifax (Belle Vue) which shows that, as might be expected, conditions there are very similar to those at Huddersfield. Data for the two stations in Huddersfield - Oakes (762 ft.) and Ravensknowle (325 ft.) - are shown in Table 20. Information is also given for Cranwell, Lincs. which the Meteorological Office has suggested as having a climate representative of the eastern part of Yorkshire and Humberside.

83. The location and topography of the study area in the path of moist maritime air masses renders it liable to heavy rainfall and strong winds. The main populated parts of the study area experience 30" to

40" of rainfall annually, although the high moorlands covering half the area fall within the 40" to 60" range. These figures compare with 23.5" for Cranwell. The rainfall declines markedly from west to east within the study area.

84. The mean maximum and minimum temperatures at Ravensknowle of 20.3°C in July and 0.5°C in January are comparable with other areas in the north of the country and little different from Cranwell which is slightly warmer in summer. Variations in altitude cause variations in temperature as between one part of the study area and another, a point illustrated by the difference in readings between the two Huddersfield stations. Such variations are also in evidence in data on air frost and the incidence of snow and fog.

85. The area has considerably fewer hours of bright sunshine than Cranwell, the figures for Ravensknowle and Oakes being 25% and 17% lower respectively. On this basis the study area is in this respect certainly at a disadvantage compared with many other parts of the region. On the other hand, there are other large centres of population in the country with only a marginally better record. And in so far as the problem is aggravated by atmospheric pollution, as it is, the situation is capable of improvement.

TABLE 20. CLIMATE

| | Huddersfield | | Cranwell (Lincs.) |
|---|---|---|---|
| | Ravensknowle (325ft.) | Oakes (762ft.) | (203ft.) |
| Temperature (°C) 1931-60 averages:- | | | |
| January: mean maximum | 5.6 | 5.0 | 5.4 |
| mean minimum | 0.5 | 0.5 | 0.5 |
| Mean | 3.1 | 2.7 | 3.0 |
| July: mean maximum | 20.3 | 19.8 | 21.0 |
| mean minimum | 11.5 | 11.1 | 11.6 |
| Mean | 15.9 | 15.4 | 16.3 |
| Year: mean maximum | 12.8 | 12.2 | 13.2 |
| mean minimum | 5.4 | 5.3 | 5.5 |
| Mean | 9.1 | 8.8 | 9.4 |
| Rainfall (inches) 1916-50 annual averages | 31.3 | 37.6 | 23.5 |
| Bright sunshine: average total hours per annum, 1931-60 | 1130 | 1243 | 1497 |

## POLLUTION

86. In the east of the study area are four local authority areas - Halifax C.B., Brighouse M.B., Elland U.D. and Sowerby Bridge U.D. - which were listed in Cmnd. 1890 (M.H.L.G. 1962) as "black", i.e. areas in which a high density of industrial and other urban development

produced severe air pollution which combined with a high local frequency of foggy conditions. The climate of the area and the configuration of the landscape have combined to create conditions which are very conducive to atmospheric pollution. Although not listed as "black", the local authority areas of the western part of the study area are not without their problems. Steep sided valleys are susceptible to temperature inversions and on nights with clear skies and generally light winds, typical of winter conditions, the air near the ground is cooled considerably and tends to flow down hill to accumulate in the valley. Pollution is trapped below this layer of cold air and is unable to escape.

87. It can be shown that the introduction of smoke control measures in the area has led to a significant reduction in atmospheric pollution. Data are available for two sites, one of which has been controlled and the other not. Site A (controlled) is in the study area and site B (not controlled) is in close proximity to it. Both sites are residential areas with a low or medium housing density. They are on the west side of their respective towns so that the prevailing wind approaches them from open country. Site A became controlled in August/September 1961, and the effectiveness of control can be judged from the data in Table 21. While there was little change in the level of pollution at site B, the levels at site A were reduced by some 52% in the summer months and 36% in the winter months.

TABLE 21. EFFECT OF SMOKE CONTROL ORDERS

| Site | Average smoke content of the atmosphere (micrograms per cubic centimetre) | |
|---|---|---|
| | Before smoke control at Site A (Jan.1960 - Aug.1961) | After smoke control at Site A (Sept.1961 - Sept.1963) |
| (a) Summer months:- | | |
| Site A | 75 | 36 |
| Site B | 66 | 59 |
| (b) Winter months:- | | |
| Site A | 190 | 122 |
| Site B | 162 | 164 |

88. The principal river running through the study area is the Calder. So far as water pollution is concerned, the river is in reasonable condition from Todmorden to Brighouse, although conditions round Sowerby Bridge are unsatisfactory. Through the valley at least half the river flow is sewage effluent of a low standard. Improvements and extensions are being, or have been carried out in the sewage disposal facilities of Elland, Sowerby Bridge and Halifax, and the situation in other parts of the study area is under review.

## DERELICTION

89. In the narrow sense of the term, derelict land is defined as "land so damaged by industrial or other development that it is an eyesore and incapable of further use without special treatment". Under this definition, land and buildings which are in use, however unkempt

and rundown they may be, are not regarded as derelict. In the context of a discussion of the environment of an area, statistics of derelict land therefore need to be treated with reserve; the acreage involved may bear little relation to the visual impact of the dereliction, and may exclude altogether a number of factors which contribute much to the impression of dereliction. A detailed account of dereliction in the study area is given in Appendix F. The outstanding feature here is that there are in the area no large areas of spoil heaps, excavations or land subject to subsidence such as create such a serious environmental problem in the Yorkshire coalfield. Neither coal mining, now no longer carried on in the area, nor stone quarrying provide major problems. The worst example of severe impact on the environment by mineral extraction occurs at Elland where a brick clay quarry dominates the town. There are also two large sand and gravel quarries in operation in the Calder valley upstream and downstream from Brighouse. These cause some unsightliness, noise and dirt in the area, but generally the study area is remarkably free from the grosser forms of dereliction. Moreover, the scale of the landscape is normally sufficient to overshadow all but the largest intrusions.

90. Nevertheless, much of the study area has an undoubted air of dereliction and dilapidation - old buildings in need of repair and repainting, vacant shops and a general lack of tangible evidence of money being spent in the area. The main cure for this is greater prosperity, but it could be that investment is itself inhibited by the poor impression given - a vicious circle. In addition to this general impression three specific aspects of the problem may be identified:-

(i) Many of the old textile mills, usually sound in structure and often handsome architecturally, and yet no longer suitable for their original purpose, are occupied by users who cannot maintain the buildings in good order.

(ii) The high incidence of small derelict sites remaining after the demolition of individual buildings and small groups of buildings. This problem is particularly acute in the hilliest areas. The sites are too small to be redeveloped and difficult to landscape satisfactorily. In the case of the demolition of back-to-earth houses, the problem becomes truly three-dimensional.

(iii) An excessive number of small waste disposal tips, often badly sited and too small to be managed efficiently. This is partly the result of the study area being served by eight separate local authorities for this purpose.

## LANDSCAPE AND RECREATION

91. In terms of the general landscape setting and outdoor recreational facilities within easy reach of the home, the area is well endowed (see Fig. 12). Although the Pennines are at this point less varied and interesting than in the areas of either the Peak District or Yorkshire Dales National Parks, they nevertheless provide an extensive area of open country of considerable attractiveness and recreational value. The moors themselves include a section of the Pennine Way, a long-distance path, and although access is limited by their wet and boggy nature, the fact that they are important water gathering grounds has meant that a number of reservoirs have been constructed. There are within the study area 22 reservoirs which are mostly on the moors.

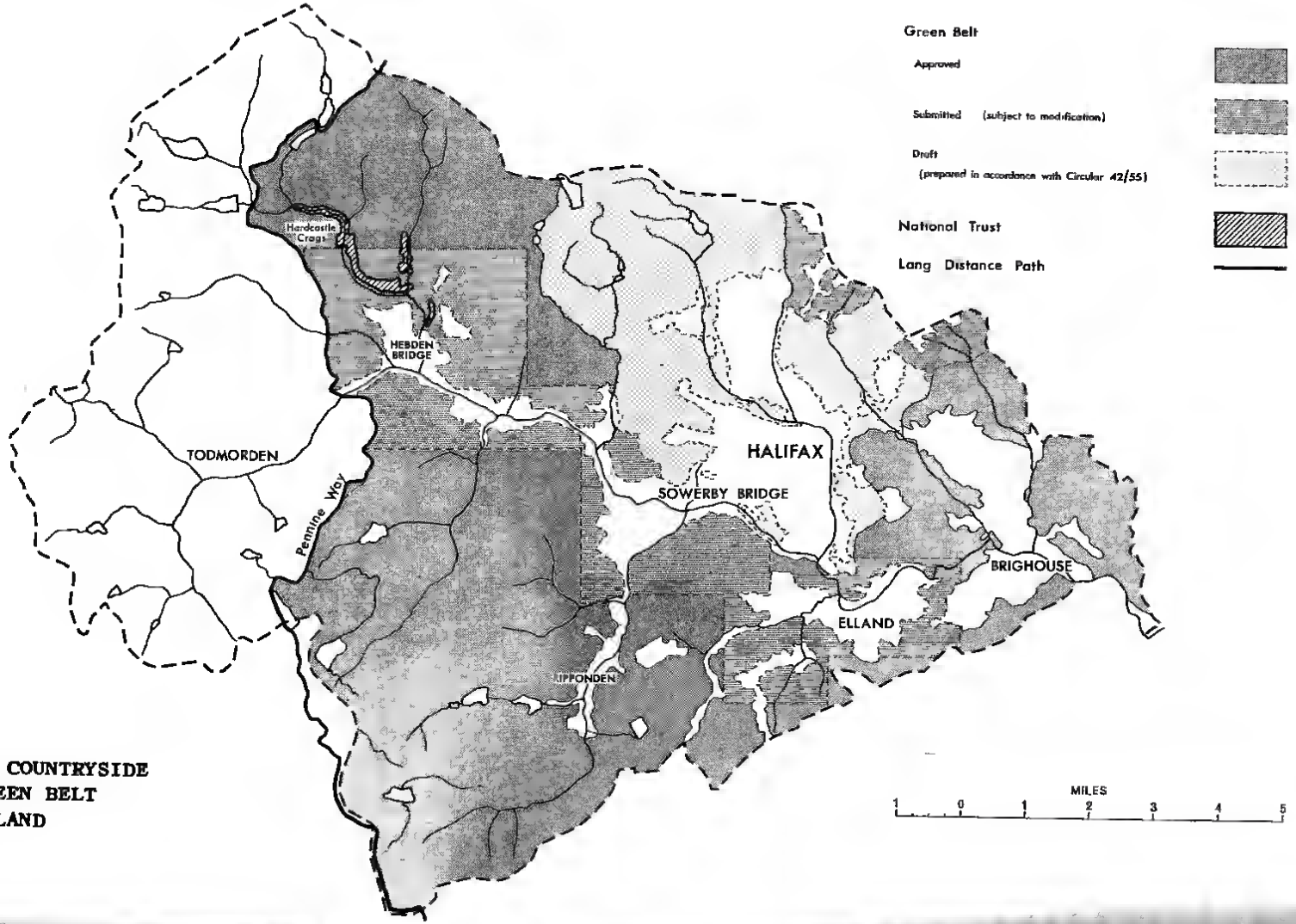


Fig.12. CONSERVATION OF THE COUNTRYSIDE
1966 SHOWING (a) GREEN BELT
(b) NATIONAL TRUST LAND
(c) PENINE WAY

The largest covers 125 acres. A further one is projected. A number of these have been opened up for fishing and boating, but even where they are not at present available for these uses, they represent an important resource capable of development. The importance of stretches of water as a focus for outdoor recreation is now widely recognised.

92. For this reason, the recreational potential of the Calder and Hebble Navigation deserves mention. The Government propose that forthcoming legislation should make special provision for two distinct groups of waterways - commercial, maintained primarily for commercial transport, and cruising, maintained primarily for powered pleasure craft. No part of the commercial section of the Calder and Hebble Navigation is in the study area, but the Government White Paper "British Waterways: Recreation and Amenity" (Cmnd. 3401) lists the 12-mile length from Sowerby Bridge to Greenwood Lock (near Dewsbury) as a cruising waterway.

93. A characteristic feature of the landscape is the deeply incised narrow valleys of the Calder and its tributaries. These are often well-wooded and contrast markedly with the bare plateau of the moors. An area of outstanding landscape value is the tributary valley north of Hebden Bridge containing Hardcastle Crags and nearby woodlands, a large area of which is owned by the National Trust. The valley of the Ryburn (Ripponden) is less steep-sided than other tributaries of the Calder. The area offers a very pleasant environment and has become popular as a residential area, conveniently situated to Halifax. New building is, however, severely restricted in all rural parts of the area, much of which has been designated as green belt. Even though sites for new houses are limited, the significant point is that much of the green belt provides an attractive immediate environment for those houses already there; and it is within easy reach of the great majority of homes in the study area.

94. In chapter 2 reference was made to the strength of local community activity and this contributes much to the provision of urban recreational facilities. Reference to Fig. 13 will indicate the various kinds of sporting and recreational facilities available. The area benefits from the efforts taken on local initiative, and there are many activities organised in schools, public buildings and cinemas. Naturally, the major recreational facilities such as cinemas, Association Football and Rugby League tend to be concentrated in the major urban centre, namely Halifax. In addition, the proximity of other large towns such as Bradford, Huddersfield, Leeds and Manchester increases the recreational opportunities.

95. The urbanised parts of the study area have some aesthetic appeal, and there are more than 600 buildings provisionally listed as being of architectural and historical interest in connection with the provisions of section 32 of the Town and Country Planning Act 1962. Few of these aspire to top priority for preservation, but they do help to give the towns and villages a definite character. This has its foundations in the hilliness of the area, the nature of its traditional industries and the use of local building materials. The townscape still owes much to the nineteenth century, dominated by the factories and terraces of that period. It is only in more recent years, with the decline in the use of local stone for building and the nation-wide standardisation of suburban development, that the predominantly nineteenth century character of the area has been partly diluted. Some of the most significant buildings are the clothiers' manor houses, often dating back to the sixteenth century; perhaps the best example is Elland New Hall, surviving largely in its original state. The

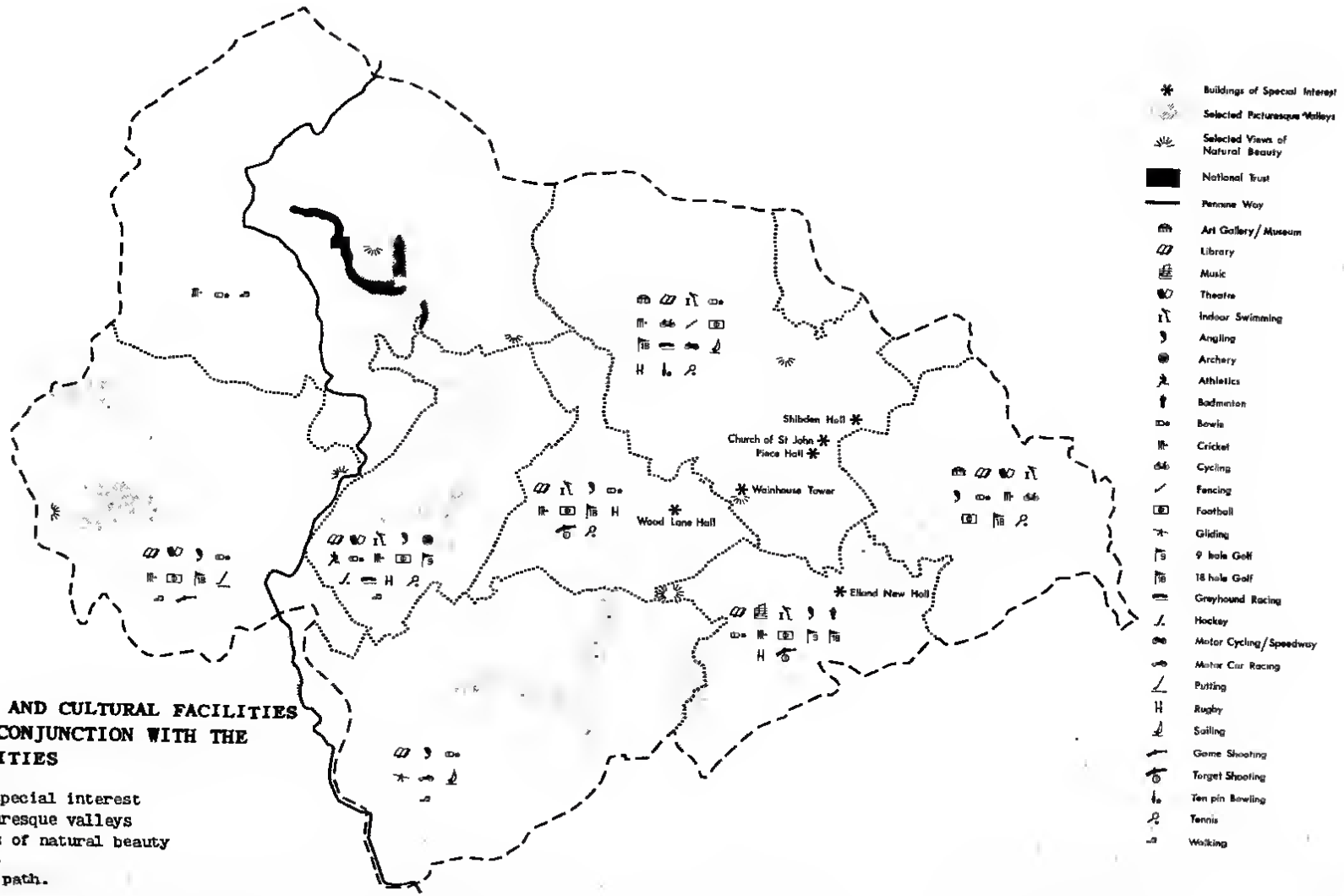


**Fig.13. RECREATIONAL AND CULTURAL FACILITIES COMPILED IN CONJUNCTION WITH THE LOCAL AUTHORITIES**

Showing (a) Buildings of special interest
(b) Selected picturesque valleys
(c) Selected views of natural beauty
(d) National Trust
and (e) Long distance path.

Piece Hall in Halifax was built in the late eighteenth century as a cloth market, and Pevsner describes it as the most important architectural monument in Halifax. Philanthropic by-products of the industrial development are the many nineteenth century almshouses, and Akroyden, a 'model suburb' in Halifax. The most outstanding landmark in the Halifax area is the Wainhouse Tower, built in 1874 as a dyeworks chimney, but never used as such. Heptonstall village is a tourist attraction in itself because of its historical quality, most of the buildings dating from the sixteenth and eighteenth centuries.

96. The study area has, therefore, an historical and an industrial heritage, reflected in its buildings and townscape, which should be set against inadequacies of older buildings judged by twentieth century standards.

## THE BUILDING STOCK: HOUSING

97. There was in the study area in 1966 a total of 75,000 dwellings. Details of household size and the proportion of dwellings vacant are shown in Table 22. These suggest that in terms of quantity, the housing stock is adequate for the present population. The average size of household has been persistently lower than the regional and national averages. Although this is to be expected in a population of high average age, it also suggests that household formation has not been held back unduly by a lack of houses. Vacancy rates are significantly higher in the study area, and a third indicator - the proportion of population in shared dwellings - shows that in 1966 the study area ratio was 0.3% compared with 1.3% and 5.2% for the region and England and Wales respectively.

TABLE 22. HOUSEHOLDS AND DWELLINGS, 1951, 1961 and 1966

| Area | Average size of Private Household (persons per household) | | | Total Dwellings occupied and vacant ('000) | | | Vacant Dwellings (as percentage of total) | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1951 | 1961 | 1966 | 1951 | 1961 | 1966 | 1951 | 1961 | 1966 |
| Study Area | 2.8 | 2.7 | 2.7 | 72.3 | 74.4 | 75.2 | 2.9 | 3.4 | 4.9 |
| Yorkshire & Humberside | 3.2 | 2.9 | 2.9 | 1,368 | 1,538 | 1,606 | 2.3 | 2.1 | 3.0 |
| England & Wales | 3.2 | 3.0 | 2.9 | 12,389 | 14,646 | 15,449 | 2.5 | 2.2 | 3.0 |

98. However, quality is of crucial importance in assessing the value of the housing stock as a local resource. The following criteria are used in making an assessment:-

(i) houses classed as "unfit" (statutory unfitness)

(ii) households lacking certain household arrangements

(iii) rateable value of domestic premises

(iv) number and type of back-to-back houses

(v) proportion of housing stock built since 1945.

## (i) Unfit Houses

99. All local authorities submitted estimates of the number of unfit dwellings in their area to the Ministry of Housing and Local Government in accordance with the Department's circular No. 11 of 1965. Statutory unfitness is defined in the Housing Act of 1957, and is determined on criteria of repair, stability, freedom from damp, natural lighting, ventilation, water supply, drainage and sanitation, and other facilities. As each authority makes its own assessment, it is clearly difficult to ensure that a common standard is observed. Nevertheless, the results given in Table 23 show that the proportion of unfit houses in the study area is undoubtedly high, and even in comparison with the region, the study area has twice its "share" of unfit houses. The results are shown graphically in Figure 14.

TABLE 23. UNFIT DWELLINGS, 1965 (FIRST QUARTER)

| Area | Number ('000) | % of existing stock |
|---|---|---|
| Study Area | 13.0 | 17.4 |
| Yorkshire and Humberside | 137.4 | 8.7 |
| England and Wales | 823.7 | 5.5 |

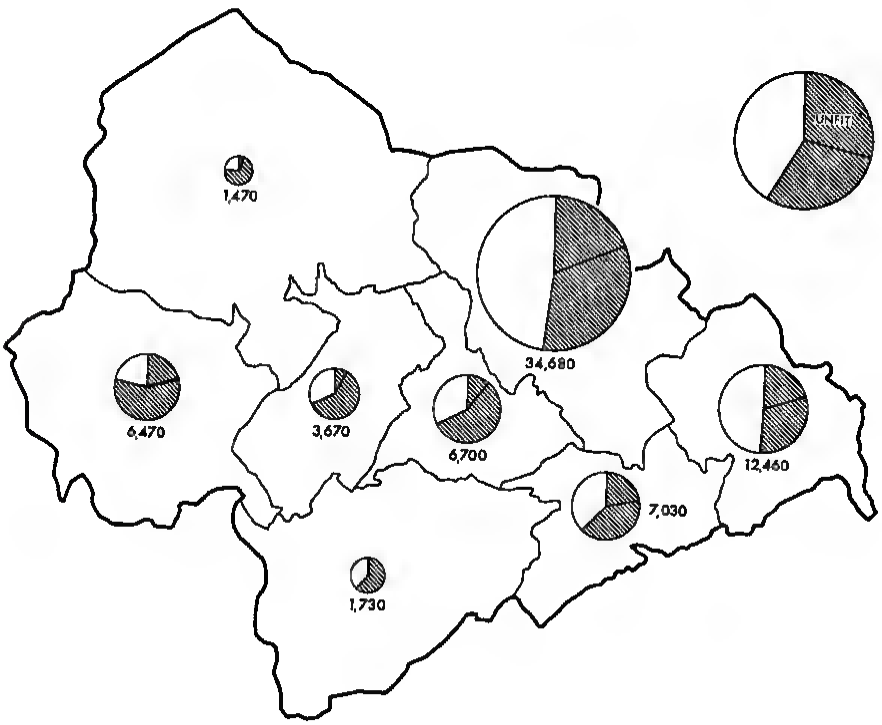


**Fig.14. "UNFIT DWELLINGS" AND DWELLINGS WITH RATEABLE VALUES NOT EXCEEDING £30**

The areas of ths circles represent the total number of dwellings in each local authority area. The hatching shows the number of dwellings with a rateable value not exceeding £30 in 1967 and is subdivided by a line showing dwellings returned by local authorities as "unfit" as at first quarter 1965. The number of dwellings in each local authority is given in figures.

(ii) Households lacking certain household arrangements

100. The 1966 Census gives details of the numbers of private households in terms of availability or otherwise of the following:-

(a) hot water tap (within the building)

(b) fixed bath (within the building)

(c) water closet (with entrance inside or outside the building).

This information is useful in that it gives an indication of the quality of housing, although deficiencies do not necessarily show that the house is unfit to the extent of meriting demolition. Table 24 gives details of households lacking amenities, and these are also shown in Fig. 15. The three criteria show the study area to be very considerably worse off than either the region or the country as a whole. The worst contrast is in the provision of fixed baths: the study area is almost twice as deficient as the country as a whole with 27% of households without a fixed bath.

TABLE 24. HOUSEHOLDS LACKING CERTAIN HOUSEHOLD ARRANGEMENTS 1966

| Area | Hot Water Tap | | Fixed Bath | | Water closet | |
|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % |
| Study Area | 12,050 | 17.2 | 18,660 | 26.6 | 1,880 | 2.7 |
| Yorkshire and Humberside | 172,940 | 11.2 | 270,880 | 17.5 | 25,200 | 1.6 |
| England and Wales | 1,925,940 | 12.5 | 2,295,690 | 14.9 | 274,260 | 1.8 |

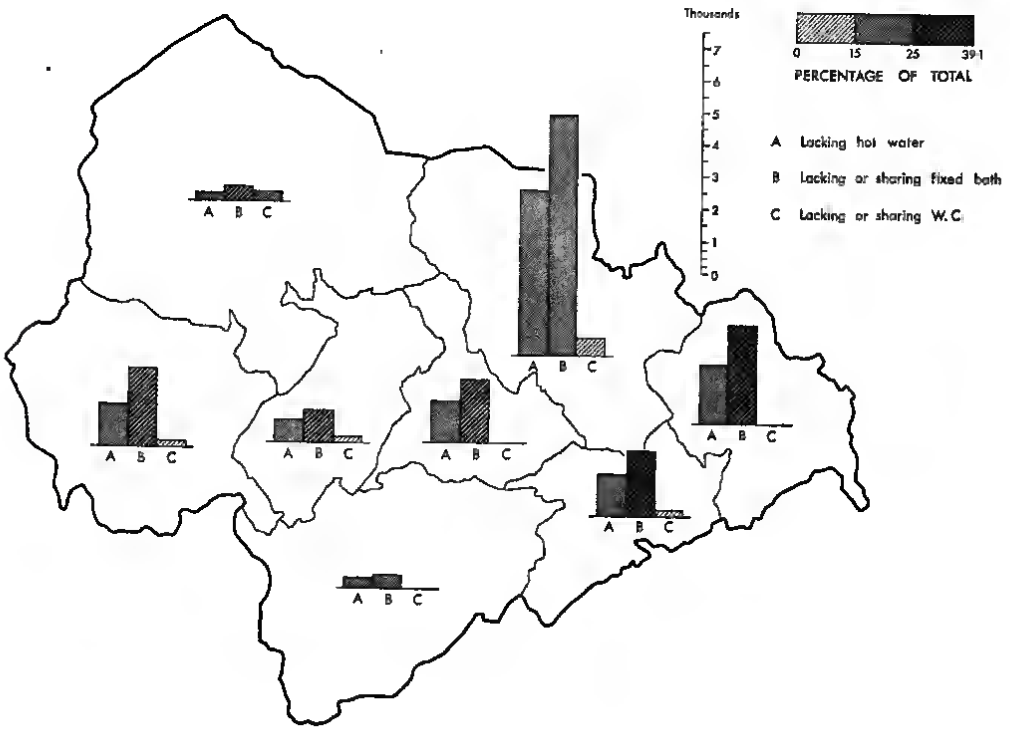


**Fig.15. HOUSEHOLD ARRANGEMENTS 1966**

The heights and shadings of the columns represent the number of households lacking particular amenities and the percentage of deficient households related to the total number of dwellings in each local authority area.

(iii) Rateable Value of Domestic Premises

101. Assessmsnts of the value of buildings made for rating purposes give a useful measurement of the quality of the housing stock. It has ths advantage that it gives a comprehensivs pioture without confining attsntion to the worst houses. The information is given in Table 25. The outstanding feature here is the great concentration of houses - 57% - in the lowest category, i.e. with a rateable value not exceeding £30 (see also Fig. 14). This valus was adopted in A Revisw of Yorkshire and Humberside as a measurement of unfitness:-

> "Most, though not all, such houses are poor in quality, built before 1914, obsolescent, and situated in areas of high density or bad lay-out; the great majority of them must be regarded as ripe for demolition and redevelopment as soon as possible." (Paragraph 325.)

On this basis, then, about half the housing stock of the study area should be regarded as unfit for use. Inevitably, the high concentration of houses in the lowest value group means that other value groups tend to be under-represented. Yet although the proportion of houses of a rateable value of over £30-56 is lower than in the region as a whols, it nevertheless excesds the national proportion. This leaves a mere 9.8% of the housing stock in the study area with a rateable value of over £56 or more. Comparable proportions are: Yorkshire and Humbersids 26.5% and England and Walss 56.3%. We conolude that the inadequacy of housing in the area extends through the complete range. Higher valus houses are extremely scarce, and this faotor was put to us on several occasions as a real impediment to recruiting managsrs and skilled workers.

TABLE 25. RATEABLE VALUE OF DWELLINGS, APRIL 1967

| Area | Percentage of dwellings with a rateable valus of:- | | | | |
|---|---|---|---|---|---|
| | Not exceeding £30 | Over £30-56 | Over £57-100 | Over £100-200 | Over £200 |
| Study Area | 56.6 | 33.6 | 8.6 | 1.1 | 0.1 |
| Yorkshire and Humberside | 31.3 | 42.2 | 23.2 | 3.1 | 0.2 |
| England and Wales | 15.4 | 28.2 | 39.2 | 15.4 | 1.7 |

(iv) Number and Type of Back-to-Back Houses

102. In 1954, the Ministry of Housing and Local Government prepared a report on back-to-back houses in the West Riding of Yorkshire. As their name indicates they are houses whsre the back of one is common to that of the house behind it, whioh faces the opposits way. There is no rear exit as in the ordinary type of through house. They exist in double rows or blocks with blank rear walls (single back or blind back houses). Also inoluded in the definition are back to earth houses which are common on the steep sites in ths study area. Nearly all the ck-to-back housss were built in the 19th century. In 1954 there were ,200 back-to-back houses in the study area, representing 12% of the

total dwellings. Although this data refers to the position some 13 years ago the number of demolitions in the period 1955 to 1966 (some 4,200) falls far short of the total (of 18,200) so that even if all those houses demolished were back-to-back at least 14,000 remained standing in 1966.

(v) Proportion of Housing Stock built since 1945

103. Although age is not entirely reliable as a guide to quality in the housing stock, a useful test is provided by the proportion of the housing stock built since the Second World War. Comprehensive statistics for all housing completions since 1945 are published by the Ministry of Housing and Local Government. Table 26 shows that in the study area, 17% of the housing stock has been built since 1945 compared with 30% in the region and 31% in the country as a whole.

TABLE 26. PROPORTION OF HOUSING STOCK BUILT SINCE 1945

| Area | Total housing stock, 1966 ('000) | No. of Dwellings completed 1945-66 ('000) | Col. (2) as a percentage of Col. (1) | Index (E & W = 100) |
|---|---|---|---|---|
| | (1) | (2) | (3) | |
| Study Area | 76.6 | 13.3 | 17.4 | 56 |
| Yorkshire & Humberside | 1,647.0 | 492.2 | 29.9 | 97 |
| England & Wales | 16,643.0 | 5,131.8 | 30.8 | 100 |

GEOGRAPHICAL VARIATIONS WITHIN THE STUDY AREA

104. Figures 14 and 15 and the tables in Appendix G give details of the variations in the quality of houses as between different local authority areas. Two areas suffer from particularly bad conditions: Sowerby Bridge U.D. and Todmorden M.B. These are also areas from which net loss of population by outward migration has been particularly heavy (see Table 2).

HOUSING RECORD, 1961-66

105. Recent progress in the construction of new houses and the demolition of unfit houses is summarised in Table 27. Figure 16 shows the number of completions for each year in individual local authority areas. Both in the public and private sectors, the trend has been upwards, but very much more steeply in the public sector. This reflects the stepping-up of the slum clearance programme; in fact, the total number of houses demolished in the six years exceeds the number built by local authorities. An examination of the record in individual local authority areas shows that the higher completion rates are to be found in the east of the study area. This applies to both private and local authority housing.

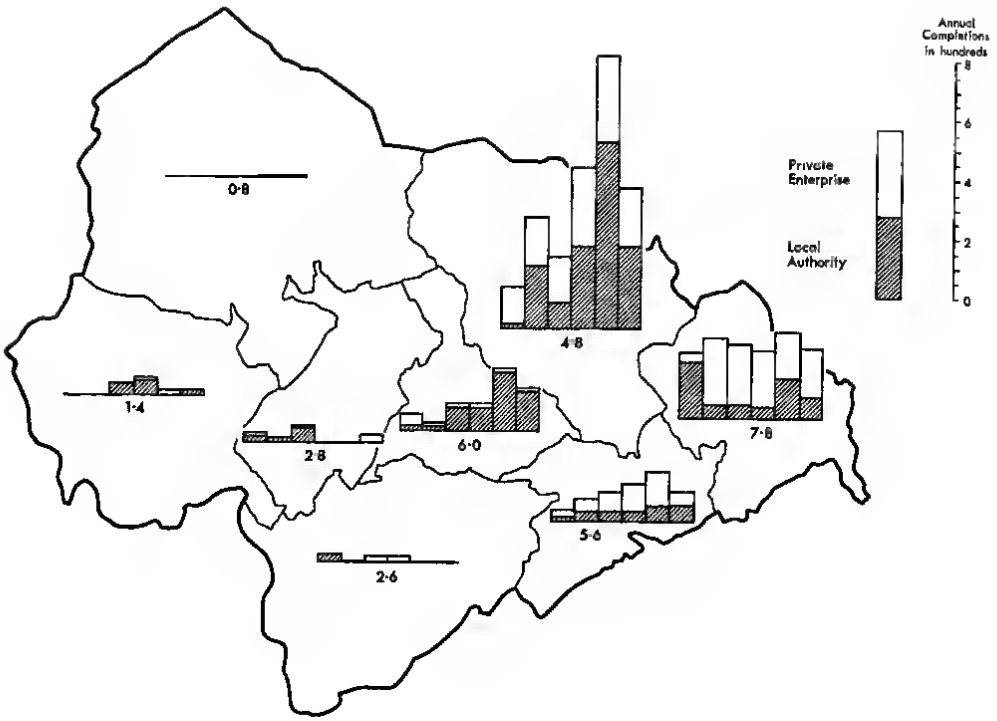


**Fig.16. ANNUAL HOUSING COMPLETIONS 1961 - 1966**

The heights of the columns are proportional to the annual housing completions for the period 1961-1966. The columns are divided representing the annual completions by the private and public sectors. The average annual completion rate per 1,000 of the population over the period 1961-1966 as a whole is given in figures.

106. The total housing stock in 1966 was 76,600 dwellings. The recent average rate of completion was about 1,000 per annum (representing 1.3% of the total stock). At this rate, assuming that all completions were replacements, it would take 77 years to replace the existing housing stock entirely. This would be a reasonable rate for an area with a housing stock of balanced quality. But in the case of the study area with its very bad quality of housing it seems that, at the very earliest,

(a) the 13,000 "unfit" dwellings could not be replaced until 1979;

(b) the 44,000 dwellings of a rateable value of less than £30 could not be replaced until 2012.

TABLE 27. HOUSING COMPLETIONS AND DEMOLITIONS, 1961-66

| Year | Houses Completed | | | Houses Demolished | Net Additions to housing stock |
|---|---|---|---|---|---|
| | Local Authority | Private Enterprise | Total | | |
| 1961 | 131 | 389 | 520 | 563 | -43 |
| 62 | 303 | 473 | 776 | 390 | 386 |
| 63 | 316 | 484 | 800 | 527 | 273 |
| 64 | 523 | 565 | 1,088 | 488 | 600 |
| 65 | 1,053 | 582 | 1,635 | 919 | 716 |
| 66 | 589 | 446 | 1,035 | 715 | 320 |
| Total 61-66 | 2,915 | 2,939 | 5,854 | 3,602 | 2,252 |
| Average (p.a.) | 486 | 490 | 976 | 600 | 375 |

If the rate of demolitions is used as the basis for the above calculations, the delays involved are greatly increased - e.g. it would take about 75 years to clear all dwellings of under £30 rateable value at the present rate.

107. It is, of course, unlikely (and probably undesirable) that all old houses will be demolished. There are a number of structurally sound old houses which are capable of successful adaptation. However, their number in relation to the total problem is probably small. Information is available which gives some indication of the effort being devoted to the improvement of older houses. This relates to the making of improvement grants by housing authorities under the Housing Act, 1964. There are two types - standard grants, designed to help meet the cost of providing certain basic facilities, and discretionary grants. Discretionary grants are made at the discretion of the local authority, and are designed to help householders improve their homes to a good general standard or to effect conversions. Schemes of discretionary grants are operated by all but one of the local authorities in the study area: as at 8th February, 1968, Brighouse M.B. did not operate a scheme.

108. Table 28 shows the number and cost of grants made in the study area in the three years 1962-5. When compared with the West Riding (Administrative County) it is clear that the average grant is much smaller in the study area (£136 compared with £317). In addition, the annual number of grants expressed as a percentage of the number of houses of a rateable value not exceeding £30 is only 1.8% in the study area as against 4.5% in the West Riding.

TABLE 28. IMPROVEMENT GRANTS 1962-5

| Area and type of grant | Cost (£'000) | Number of grants made | | Col. (3) as % of houses with a rateable value not exceeding £30 |
|---|---|---|---|---|
| | | Total | Annual Average | |
| | (1) | (2) | (3) | |
| Study Area:- | | | | |
| Standard grants | 314 | 2,666 | 667 | 1.5 |
| Discretionary grants:- | | | | |
| (a) improvement of dwellings | 81 | 355 | 90 | 0.2 |
| (b) conversions | 27 | 88 | 22 | 0.1 |
| TOTAL | 422 | 3,109 | 779 | 1.8 |
| West Riding (Administrative County):- | | | | |
| Standard grants | 2,784 | 27,414 | 6,854 | 3.3 |
| Discretionary grants:- | | | | |
| (a) improvement of dwellings | 8,135 | 9,415 | 2,354 | 1.1 |
| (b) conversions | 1,094 | 1,026 | 256 | 0.1 |
| TOTAL | 12,013 | 37,855 | 9,464 | 4.5 |

109. An exercise has been carried out to illustrate the implications of the above findings in terms of the future house construction programme. It was neoessary to make assumptions as to the population of the study area in 1981. The following alternatives are used:-

(a) retention of all natural increase - giving a 1981 population of 215,300;

(b) continuation of net loss by outward migration - giving a 1981 population of 190,300.

In 1966 the average household size in the region was 2.9 persons per household, compared with 2.7 in the study area. The Ministry of Housing and Local Government has produced estimates of numbers of households in 1981. Assuming that each household will occupy a separate dwelling, and making allowances for vacant dwellings and population in institutions, the total housing requirement in 1981 is estimated as:-

(a) 81,000 for the population of 215,300, and

(b) 72,000 " " " " 190,300.

110. These estimates have been examined with the estimates of sub-standard dwellings made earlier in this section to produce a range of possible targets for the local housing programme. There are four combinations:-

| | | |
|---|---|---|
| (i) | lower 1981 population with minimum replacement | 11,500 new dwellinge (750 p.a.) |
| (ii) | higher 1981 population with minimum replacement | 20,500 new dwellings (1,350 p.a.) |
| (iii) | lower 1981 population with maximum replaoement | 42,500 new dwellings (2,850 p.a.) |
| (iv) | higher 1981 population with maximum replacement | 51,500 new dwellings (3,450 p.a.) |

These estimates include in each case an arbitrary allowance of 1,500 houses in respect of demolitions for reaeons other than unfitnees (e.g. road improvement, central area redevelopment). "Minimum replacement" is based on the number of "unfit" dwellings (13,000); "maximum replacement" on the number of dwellings of under £30 rateable value (44,000).

111. This range of estimates is given for illustrative purposes only. They show that when determining the local housing target, the ohoice of replacement rate will have a far greater effect than assumptions as to the rate of population migration. However, this may be a false distinction, insofar as bad houeing conditions and net outward migration may well be linked - a possibility discussed further in Chapter 6 (para. 224).

## THE BUILDING STOCK: INDUSTRIAL BUILDINGS

112. In 1956, H.M. Faotory Inspectorate carried out a survey of all 760 factories in Halifax C.B. This was the basis of a report Industrial Health: A Survey in Halifax published by H.M.S.O. in 1958. It produoed some useful information on the quality of the industrial building stock, although concentrating on the implications for health. Since that time there have been a number of major developments especially at the more prosperous firms, but not to such an extent as to alter substantially the overall picture presented in the 1958 report.

113. The survey found that the main types of factory buildings were:-

(a) multi-storey mills - large mainly stone-built faotories and warehouses of three or more etoreys ereoted almost entirely for the textile trades in the nineteenth oentury;

(b) two-storey factory buildings - a few old mille but generally the more modern types of industrial building, with some two-storey buildings of the stable and outhouse type; and

(o) single-storey etone or briok buildings - mainly north-light roofed weaving sheds but some modern buildings.

In addition eome small factories were housed in the etone buildings in the oentre of the town which were mainly used for offices and shops.

114. Over 90% of all industrial buildings were solidly constructed with walls and roofs of local sandstone. There were some 75 multi-storey stone mills scattered throughout the borough and a further 20 warehouses in the lower part of the town. Roughly half of the workers were employed in this type of building. Almost all the mills and a great number of the single-storey sheds dated from the middle and latter half of the nineteenth century. A few substantial structures erected in the 1830's were still in use.

115. Ten per cent of buildings were unsatisfactory from a structural point of view, e.g. they were dilapidated and no longer weatherproof. Most were single or two-storey buildings and they were mainly smaller works. The general impression, however, was of a stock of structurally sound old buildings with, on the credit side, good insulation from the extremes of climate and an absence of crowding or congestion. The disadvantages were poor sanitary accommodation, ventilation and washing facilities and a low standard of decoration. Moreover in many cases close supporting pillars inhibited full utilisation of the large areas of open floor space. An assessment of environmental conditions was made under a number of headings: temperature and ventilation, washing facilities, cleanliness, seating, air space, lighting, sanitary accommodation, flooring and noise. Overall conditions were assessed as follows:-

| Assessment | % of Workplaces | % of Workers involved |
|---|---|---|
| Good | 14 | 22 |
| Generally satisfactory | 61 | 62 |
| Unsatisfactory | 25 | 16 |

These figures show that unsatisfactory conditions were found more in the smaller factories; although 25% of all factories were unsatisfactory, this affected only 16% of all workers in manufacturing.

116. It was found that in many cases improvements had been held back because individual factories were rented. There were also factors holding back new building; first the shortage of suitable land and secondly, the fact that there is an ample supply of old industrial property at comparatively low rentals - "Despite all the handicaps of poor housing, it appeared that unless a firm was very successful in building up its capital reserves, it preferred to keep down overheads by remaining in its old premises rather than embarking on new buildings at the high prices ruling to-day". (p.5)

117. Further information about the present quality of the stock of industrial buildings was obtained in our industrial survey. The aspect covered was the adequacy of the buildings for the industrial process concerned. 23% (22 of the 96 respondents) were satisfied that their buildings were inadequate for the processes at present carried on or intended to be carried on in them. Although not conclusive the results suggest that establishments within the size range 50-499 employees had rather less difficulty than those which were either very small or large:-

| | |
|---|---|
| Firms with 0-49 employees | - 7 out of 22 had inadequate buildings |
| " " 50-499 " | - 10 out of 61 had inadequate buildings |
| " " 500 and more employees | - 5 out of 13 had inadequate buildings |

Analysis of the results by industry shows that the principal industries - wool textiles, engineering, and food - were generally well satisfied with their buildings. It was the smaller industries which accounted for the majority of inadequate buildings. Those industries with two or more instances were:-

| | | |
|---|---|---|
| XIII | Bricks, Pottery, Glass etc. | 4 out of 5 |
| X (pt.) | Other textile manufacturing | 4 " " 11 |
| XIV | Timber and Furniture | 3 " " 5 |
| IX | Other metal goods | 2 " " 3 |
| XII | Clothing | 2 " " 7 |
| VI | Engineering | 2 " " 20 |

118. The most frequently mentioned deficiency was quantitative, i.e. lack of floor space, whether for production or storage (13 mentions). This relates, of course, to the problems of individual firms rather than to any overall deficiency. Difficulties associated with the quality of buildings were mentioned as follows:-

| | |
|---|---|
| General difficulties associated with old buildings | - 9 mentions |
| Difficulties arising from multi-storey buildings | - 5 " |
| Bad layout | - 3 " |
| Lack of headroom | - 2 " |

119. A third source of information concerns the floor area of new buildings and extensions completed for manufacturing industries in recent years. Data for the years 1953-66 are shown in Table 29. The index number in the last column of the table relates the area of new buildings and extensions completed to the number of employees in manufacturing industries. The index number of 59 (G.B. = 100) indicates that recent investment in industrial buildings in the study area has been at a relatively low level.

TABLE 29. NEW BUILDINGS AND EXTENSIONS COMPLETED FOR MANUFACTURING INDUSTRIES

| Area | Total employees in manufacturing industries at mid-1966 | Area of new buildings and extensions completed for manufacturing industries 1953-1966 (inclusive) | Index of new buildings and extensions completed based on comparisons of figures in previous columns |
|---|---|---|---|
| | ('000) | (million sq.ft.) | (G.B. = 100) |
| Study Area | 60.9 | 2.36 | 59 |
| Yorkshire and Humberside | 901.8 | 55.98 | 95 |
| Great Britain | 8,935.7 | 587.50 | 100 |

120. These three sources of information - the 1956 survey by H.M. Factory Inspectorate, our own industrial survey and the data on new industrial building - give a general impression of a predominance of old buildings which although structurally sound and providing cheap accommodation nevertheless present difficulties in adaptation. This can affect adversely not only operational efficiency but also industrial health and the attractiveness of jobs to employees. On the other hand, the fact that cheap old industrial premises are available can be a great advantage to new enterprises in the crucial early stages of growth. It can also be an important factor in attracting industries into the area from elsewhere. This was one of the principal reasons given for the establishment of a large factory in the area some 10 years ago. There are also examples of smaller firms moving in to take advantage of cheap premises. Moves within the study area have also been facilitated by the availability of premises; one very large establishment in the non-textile sector is housed in modernised mill buildings. There is an ample supply of industrial buildings; the newer types are fairly cheap, while the older mills are virtually unsaleable. But it should be pointed out that not all firms find old premises suitable.

## THE BUILDING STOCK: GENERAL

121. An overall assessment of the quality of the building stock may be obtained by using rateable value per head of population as a measurement. Table 30 shows the rateable value per head for the study area both in total and broken down by type of premises. The overall index of 59 for the study area is certainly low, particularly for an area which includes a County Borough. Domestic premises, accounting for nearly half the total rateable value gave a lower index number (55), while industrial premises (86) were higher, but still substantially below national and regional levels. A local economy based on manufacturing might be expected to show an index higher than 100. The low index number of all other types of premises (54) to a large extent reflects the relatively low level of service employment already noted - 28 per cent in the study area compared with 50 per cent in Great Britain, giving an index of 56. (See Table 10.) It would appear from this evidence that the quality of the building stock used by service industries taken as a whole does not differ markedly from the national average.

122. So far there have been no major post-war re-development schemes of town centres completed in the study area. There are, however, a number planned. The furthest advanced is the re-development of part of the central area of Halifax based on the renewal of buildings in the central area. In the centre of Elland development has taken place on a considerable scale, but this has involved mainly housing. In 1966 the Ministry of Housing and Local Government instituted a system to control public investment in town centre re-development schemes. (Circular 50/66.) There was concern that in the country as a whole the schemes being put forward greatly exceeded both the need and possibility of execution. A number of schemes in the study area were submitted to the Minister. Of these, two in Halifax received approval by 4th July, 1967. Further schemes are also under consideration both in Halifax and in other towns in the area.

TABLE 30. RATEABLE VALUE PER HEAD BY TYPE OF PREMISES, 1967

| Type of Premises | Study Area | | Yorkshire and Humberside | | England and Wales | |
|---|---|---|---|---|---|---|
| | R.V. per head £ | Index (E & W = 100) | R.V. per head £ | Index (E & W = 100) | R.V. per head £ | Index (E & W = 100) |
| Domestic | 12.4 | 55 | 15.6 | 70 | 22.4 | 100 |
| Industrial | 5.7 | 86 | 6.0 | 91 | 6.6 | 100 |
| All other types:- | | | | | | |
| Shops | 2.3 | 51 | 3.3 | 73 | 4.5 | 100 |
| Offices | 0.3 | 11 | 0.8 | 30 | 2.7 | 100 |
| Other commercial | 2.2 | 67 | 2.3 | 70 | 3.3 | 100 |
| Remainder | 4.8 | 66 | 6.5 | 89 | 7.3 | 100 |
| Sub-total | 9.6 | 54 | 12.9 | 72 | 17.8 | 100 |
| Total R.V. per head | 27.7 | 59 | 34.5 | 74 | 46.8 | 100 |

Notes:-

(1) These ratios are based on the estimated home population at June 1966.

(2) The "Remainder" category includes property owned by the Crown (e.g. National Health hospitals) or used for Crown purposes, places of entertainment, education, cultural uses, power, transport etc. The principal types of property which are not assessed are agricultural land and buildings (other than dwelling-houses) churches, most local authority parks and operational land of the British Railways Board.

123. Finally, some indication of the local level of new investment in buildings and civil engineering work may be obtained from the proportion of the local labour force employed in the construction industry (see Table 31). In order to eliminate difficulties presented by fluctuations in employment, an average employment figure has been used for the five years 1962-6 and compared with the corresponding national and regional data. Although there are a number of difficulties in interpreting the results - e.g. variations in productivity as between different sectors of the industry - it should be noted that the estimates are corrected in all cases where a significant number of employees of a contractor based in one area are engaged in work in another area. The index of 67 suggests a low level of investment in the infrastructure of the area.

TABLE 31. EMPLOYMENT IN CONSTRUCTION 1962-66

(Average annual number of employees)

| Area | Average Total Employment ('000) | Average Employment in Construction | | |
|---|---|---|---|---|
| | | No. ('000) | % | Index (G.B. = 100) |
| Study Area | 93.3 | 4.1 | 4.4 | 67 |
| Yorkshire and Humberside | 2,087 | 137.4 | 6.6 | 93 |
| Great Britain | 23,235 | 1649 | 7.1 | 100 |

## PUBLIC UTILITIES

124. There would appear to be no deficiency in the local supplies of water, gas or electricity such as might inhibit economic growth. The area is served by the Calderdale Water Board and is a net exporter of water; the moorland catchment areas also supply Wakefield and Dewsbury. It would appear likely that the area will continue to provide a surplus for consumption elsewhere. The area is well served by gas and electricity. Responsibility for domestic refuse disposal is divided between the eight local authorities as has already been mentioned in the context of the problem of dereliction. While there has been no real indication of particular difficulties, larger units would be more economical. A joint refuse disposal scheme is now being discussed in Brighouse and nearby authorities such as Spenborough, and these developments are to be encouraged. Industrial waste disposal is not usually the responsibility of the local authorities, and industrial concerns frequently make other arrangements for disposal. The industrial survey indicated that 16 firms were dissatisfied with waste disposal arrangements, but private waste disposal companies are now expanding and could help to overcome these difficulties. A number of schemes for improving the facilities for the disposal of sewage and trade effluent are also under preparation - at Sowerby Bridge, Brighouse, Elland and Halifax.

## EDUCATION SERVICES

125. The study area is covered by two education authorities - Halifax C.B. and the West Riding County Council. Any attempt to make a simple assessment of the quality of education services provided in the study area is bound to be only a rough guide to a complex and

subtle situation. From a number of possible measurements, three are used here:-

(i) awards to attend universities and other institutions of higher education;

(ii) oversize classes;

(iii) the quality of school buildings.

In addition it will be recalled from Chapter 2 (para. 38) that the proportion of pupils staying on at school until the age of 17 is about average when compared with the national figures.

126. The number of awards to attend universities and other higher education institutions tends to vary from year to year. The data in Table 32 are therefore based on averages for the four years 1962-5. These statistics show that the number of students proceeding to higher education is comparable with the national average in Halifax C.B. while varying considerably in the West Riding Divisions.

TABLE 32. AWARDS FOR FURTHER EDUCATION 1962-5 (ANNUAL AVERAGE)

| Area | Awards made by Local Education Authorities | | | | | | Students entering Training Colleges | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Tenable at Universities | | Tenable at other places of further education | | | | | | | |
| | | | Full value | | Lesser value | | | | | |
| | per '000 | Index | per '000 | Index | per '000 | Index | per '000 | Index | per '000 | Index |
| Halifax C.B. | 37.4 | 99 | 12.5 | 41 | 20.6 | 144 | 41.5 | 133 | 112.0 | 99 |
| Calder Division (West Riding) | 40.1 | 107 | 39.0 | 129 | 18.1 | 127 | 31.8 | 102 | 129.0 | 118 |
| Ashlar Division (West Riding) | 31.3 | 83 | 6.5 | 21 | 5.1 | 35 | 16.4 | 52 | 59.3 | 52 |
| Study Area | 34.7 | 92 | 16.4 | 54 | 15.5 | 108 | 30.5 | 98 | 97.1 | 86 |
| Yorkshire and Humberside | 37.8 | 101 | 34.7 | 115 | 5.6 | 39 | 41.2 | 132 | 119.1 | 105 |
| England and Wales | 37.6 | 100. | 30.2 | 100 | 14.3 | 100 | 31.2 | 100 | 113.3 | 100 |

127. The seoond measurement is the proportion of classes which are oversize - i.e. over forty pupils in junior classes or over thirty in secondary classes.

TABLE 33. OVERSIZE CLASSES 1962-5

(a) Junior Classes — % of all classes

| Area | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|
| Halifax C.B. | 17 | 23 | 17 | 12 |
| Calder Division (West Riding) | 1 | 1 | 0 | 0 |
| Ashlar Division (West Riding) | 3 | 1 | 3 | 2 |
| England and Wales | 14 | 15 | 14 | 13 |

(b) Senior Classes

| | | | | |
|---|---|---|---|---|
| Halifax C.B. | 53 | 46 | 39 | 38 |
| Calder Division (West Riding) | 59 | 46 | 45 | 43 |
| Ashlar Division (West Riding) | 48 | 39 | 36 | 37 |
| England and Wales | 48 | 47 | 43 | 40 |

Table 33 shows that in senior classes the situation in the study area is broadly similar to the national. In junior schools there were by 1965 no oversize classes in the Calder division of the West Riding and the proportion in Halifax C.B. is decreasing rapidly.

128. Table 34 shows the proportion of pupils in schools which are affected by certain deficienoies - e.g. outdoor sanitation, cramped site, poor kitchen and dining facilities, no hot water supply. The total area referred to covers the study area plus Queensbury and Shelf U.D. The data, although incomplete, suggests that the proportion of children in inadequate school buildings is no greater than in either the East and West Ridings or England and Wales. But within the study area, the situation in the Ashlar division is very much worse than in either Halifax or the Calder division.

TABLE 34. PUPILS IN PRIMARY AND SECONDARY SCHOOLS WHICH ARE AFFECTED BY CERTAIN DEFICIENCIES, 1962 AND 1967

| Area | 1962 | | | | 1967 | | |
|---|---|---|---|---|---|---|---|
| | Total Pupils | Pupils in schools affected by deficiencies | | | Total Pupils | Pupils in schools affected by deficiencies | |
| | | No. | % | Index (E & W = 100) | | No. | % |
| Calder Division | 7,360 | 3,470 | 47 | 81 | 7,660 | 2,290 | 30 |
| Ashlar Division | N.A. | N.A. | N.A. | N.A. | 8,890 | 5,860 | 66 |
| Halifax C.B. | 15,190 | 6,960 | 46 | 79 | 15,350 | 4,120 | 27 |
| Total | N.A. | N.A. | N.A. | N.A. | 31,900 | 12,270 | 38 |
| E. & W. Ridings | 659,400 | 401,200 | 61 | 105 | N.A. | N.A. | N.A. |
| England and Wales | 6,704,900 | 3,910,900 | 58 | 100 | N.A. | N.A. | N.A. |

## HEALTH SERVICES

129. The planning of health services is based on national targets for standards of provision; but for the purposes of the present study comparison with the current national situation is considered to be often more relevant although it must be admitted that the significance of the bed as the unit for measuring the hospital provision required can be exaggerated. For hospital planning purposes, the Leeds Regional Hospital Board has defined an area which approximates to the study area.* This area is administered by the Halifax Area Hospitals Management Committee. Certain specialised acute treatments are dealt with in units outside the area. For mental illness and mental subnormality the Halifax Planning Area forms part of a wider area, the services being based largely on Storthes Hall Hospital (near Huddersfield) and Westwood Hospital (near Bradford) respectively. Table 35 shows the number and rate of provision of hospital beds in the Halifax Planning Area. There is an excess of geriatric beds but this situation would be brought into balance if St. John's Hospital (currently providing some 360 geriatric beds) were to be closed when current geriatric developments are completed. With regard to mental illness there will be new accommodation in the area which will be associated with Storthes Hall Hospital where it is anticipated that there will be some reduction in size.

130. Ultimately hospital services will be concentrated at a new district general hospital on the site of the present Halifax General Hospital. This will include short-stay beds for geriatric and psychiatric cases. Long-stay accommodation is being provided by development of Northowram Hospital. Services for mental subnormality will ultimately be provided in new accommodation on a site to be selected in the area. The following major schemes (i.e. those costing more than £¼m.) are planned:-

Northowram Hospital - geriatric development - started early in 1967.

Halifax General Hospital - maternity unit and psychiatric unit - started early in 1968.

Northowram Hospital - psychiatric unit - expected to be started in 1971/2.

Northowram Hospital - further psychiatric accommodation - no starting date yet estimated.

Halifax General Hospital - further development - no starting date yet estimated.

There is therefore a continuous programme of major improvements planned for the hospitals in the area.

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* The Halifax planning area consists of the study area plus Queensbury and Shelf U.D. and minus part of Brighouse M.B.

TABLE 35. PROVISION OF HOSPITAL BEDS, 1967

| Service | Halifax Planning Area | | | England and Wales |
|---|---|---|---|---|
| | No. 1967 | Rate (per 1,000 Population in 1966) | Proposed Provision (per 1,000 Population in 1981) | Rate (per 1,000 Population in 1966) |
| Locally Based Services | | | | |
| Acute Beds | 634 | 3.4 | 3.3 | 3.7 |
| Maternity | 108 | 0.6 | 0.6 | 0.5 |
| Geriatrics | 441 | 2.3 | 1.8 | 1.2 |
| (per 1,000 population aged 65 and over) | | (16.5) | (10.0) | |
| Totals | 1,183 | 6.3 | 5.7 | 5.4 |
| Services for which Halifax is part of a wider area | | | | |
| Mental Illness | 494* | 2.6 | 1.9 | 2.9 |
| Mental Sub-normality | 214* | 1.1 | 1.1 | 1.3 |
| Totals | 708 | 3.7 | 3.0 | 4.2 |

* Halifax portion of beds serving a wider area.

Notes:

(1) For hospital planning purposes, acute beds includes provision for infectious diseases, tuberculosis and long-stay paediatrics; and mental illness includes medium/long stay psychiatry and acute psychiatry.

(2) The population of the Halifax Planning Area was 190,000 in 1966 (26,800 aged over 65). The 1981 provision is also based on a total population of 190,000 (35,000 aged over 65).

131. The numbers of general practitioners and dentists in Halifax C.B. are shown in Table 36. The numbers are sufficiently small for the addition or subtraction of any one or two doctors or dentists to make a significant difference to the ratios with population. The Medical Practices Committee "designated" Halifax as under-doctored in

November 1965. Initial practice allowances are available to encourage doctors to begin practising in such areas. Allowances of a different kind are also available to doctors providing full general medical services in areas which have been continuously "designated" for at least three years. Of the 13 county boroughs in the region, six (including Halifax) were "designated" at 1st January, 1968, five were partly "designated" and two - Huddersfield and Wakefield - were classified as "open". The remainder of the study area outside Halifax was "open" (no monetary allowance available but normally no difficulty in obtaining admission to the medical list) with the exception of Ripponden U.D., which was classified as "intermediate" (admission to the list "should not be taken for granted"). Thus although Halifax C.B. (in common with many other county boroughs) was under-doctored, the remainder of the study area was better placed. For dentists the position in Halifax in terms of ratio to population differed little from the national average. It should be noted that school dentists are not included in the figures.

TABLE 36. GENERAL PRACTITIONERS AND DENTISTS

| Area | General Practitioners, 1967 (at 1st October) | | | Dentists, 1966 (at 1st October) | | |
|---|---|---|---|---|---|---|
| | No. | Patients per doctor(2) | Index (E & W = 100) | No. | Population per dentist | Index (E & W = 100) |
| Halifax C.B. | 33 | 2,785 | 113 | 19 | 4,996 | 108 |
| Yorkshire & Humberside (1) | 1,886 | 2,563 | 104 | 826 | 5,870 | 127 |
| England and Wales | 19,849 | 2,470 | 100 | 10,362 | 4,615 | 100 |

(1) For statistics on dentists, the regional figures refer to the geographical county of Yorkshire only (i.e. the East, West and North Ridings).

(2) The true number of patients per doctor will be slightly smaller, since it is not possible to eliminate all duplicate entries from doctors' lists.

132. Detailed information is available on health and welfare services provided by local authorities in 1965. For the study area, the local authorities concerned are Halifax C.B. and West Riding C.C., and Tables 37 and 38 respectively show the level of provision of institutional and domiciliary services in this field. Here again small changes in the numbers of places or staff provided can have an unduly large effect on the ratios and this should be borne in mind when interpreting this data. It should also be noted that the level of provision of health services is not necessarily uniform throughout the West Riding. The principal conclusion to be drawn from the tables is that although there are some differences in the scales of provision as between Halifax C.B. and the West Riding, the overall position in the study area would appear to be similar to the national one.

TABLE 37. PLACES IN CERTAIN HEALTH AND WELFARE PREMISES, 1965

| | Halifax C.B. | West Riding C.C. | England and Wales |
|---|---|---|---|
| Places for the mentally subnormal per 1,000 population | | | |
| in adult training centres | 0.26 | 0.43 | 0.32 |
| in junior " " | 0.38 | 0.42 | 0.39 |
| in adult hostels | - | - | 0.03 |
| in junior " | - | - | 0.02 |
| Places in homes for persons aged 65 and *over (per 1,000 population of that age group) | 25.5 | 12.7 | 15.6 |
| Persons in special housing for the elderly (per 1,000 population aged 65 and over) | - | 69.3 | 10.9 |

* including homes for the elderly mentally infirm and homes for the physically handicapped.

TABLE 38. DOMICILIARY SERVICES, 1965

| Staff (whole-time equivalent) per '000 population | Halifax C.B. | | West Riding C.C. | England & Wales |
|---|---|---|---|---|
| | No. | Per '000 population | Per '000 population | Per '000 population |
| Health visitors | 5 | 0.05 | 0.11 | 0.12 |
| Home helps | 65 | 0.68 | 0.68 | 0.63 |
| Home nurses | 22 | 0.23 | 0.16 | 0.18 |
| Midwives | 7 | 0.07 | 0.13 | 0.12 |
| Mental Health social workers | 4 | 0.04 | 0.04 | 0.03 |
| Other social workers | 7 | 0.07 | 0.05 | 0.05 |
| Total | 110 | 1.14 | 1.17 | 1.13 |
| Index (E.& W. = 100) | - | 101 | 104 | 100 |

133. An examination of the Registrar-General's Annual Statistical Reviews for 1961-5 shows the death rates in the study area to be consistently above the national average. These rates are adjusted to eliminate the effects of variations in age structure as between one area and another, and to correct for the uneven distribution of hospitals admitting patients liable to a high death rate. The average ratios of the local adjusted death rates to the national death rate are shown in Table 39. For Halifax C.B. the ratio was 1.22. Of the four other local authority areas in the study area with populations exceeding 10,000, three had a similar ratio; the exception was Brighouse M.B. (1.11) but even this was considsrably higher than the national rate.

134. Comparison with other areas of the country shows that a rate exceeding 1.20 is unusually high. In 1961 (which, with 1964 was an "average" year in Halifax C.B.) this rate was exceeded only in certain County Boroughs (e.g. Stoke on Trent, Gateshead, South Shields) and Lancashire as a whole, which had by far the worst rate for a whole county in the country (1.26). Some of its constituent County Boroughs, e.g. Blackburn, Barnsley, Oldham, Rochdale, St. Helens, Salford and Wigan had a rate over 1.30. Halifax (1.24 in 1961) had the highest rate of the County Boroughs in the West Riding.

TABLE 39. RATIO OF THE LOCAL ADJUSTED DEATH RATE TO THE NATIONAL DEATH RATE: AVERAGE FOR THE YEARS 1961-5

| | |
|---|---|
| Halifax C.B. | 1.22 |
| Brighouse M.B. | 1.11 |
| Elland U.D. | 1.21 |
| Sowerby Bridge U.D. | 1.20 |
| Ripponden U.D. | 1.06* |
| Hebden Royd U.D. | 1.17* |
| Hepton R.D. | 1.13* |
| Todmorden M.B. | 1.23 |

* These statistics relate to areas with less than 10,000 population and should be treated with caution.

135. One possible reason for this high mortality rate is the harmful effect of bad environmental conditions. In order to investigate this possibility, an analysis has been carried out of the causes of death in 1964 in Halifax C.B. in comparison with England and Wales. The results are given in Table 40. Even allowing for the fact that these figures are based on unadjusted data, it would appear that the high mortality rate in Halifax C.B. was very largely attributable to coronary disease. In England and Wales the proportions of all deaths from this cause were some 24% for males and 16% for females. In Halifax the proportions were 32½% and 25% respectively. Pneumonia was rather more frequently a cause of death of men than women in Halifax, but other causes of death were of broadly similar importance in both Halifax and England and Wales. The cause of this particularly high local incidence of mortality from coronary disease has not yet been identified. It has been observed elsewhere, and research in this country and abroad investigating a number of possible social and physical variables, has found a significant correlation between

TABLE 40. PRINCIPAL CAUSES OF DEATH, 1964

(all causes accounting for at least 5% of male or female deaths)

| Ref. No. | Disease | % of all male deaths | | % of all female deaths | |
|---|---|---|---|---|---|
| | | Halifax C.B. | England and Wales | Halifax C.B. | England and Wales |
| 11 | Malignant neoplasm - lung | 6.4 | 7.8 | * | * |
| 14 | Other malignant and lymphatic neoplasms | 6.9 | 9.3 | 7.2 | 9.2 |
| 17 | Vascular lesions of the nervous system | 10.0 | 10.9 | 18.9 | 17.1 |
| 18 | Coronary disease | 32.5 | 23.8 | 24.8 | 15.9 |
| 20 | Other heart disease | 5.5 | 8.3 | 11.0 | 12.1 |
| 23 | Pneumonia | 6.4 | 5.1 | 6.5 | 5.3 |
| 24 | Bronohitis | 7.0 | 7.5 | * | * |
| | All other causes | 25.3 | 27.3 | 31.6 | 40.4 |
| | TOTAL | 100.0 | 100.0 | 100.0 | 100.0 |

* less than 5.0%; included in "All other causes".

mortality from cardiovascular disease (which includes coronary heart disease) and the softness of the local water supply. It is not known whether or not this is a cause-and-effect relationship. For the purposes of this study, it is sufficient to point out that although the local mortality rate is high, the data available do not appear to support the suggestion that this might be the result of bad environment.

136. However, some evidence of poor social and/or physical environment is to be found in the data on infant mortality reproduced in Table 41.

TABLE 41. INFANT MORTALITY, 1960-64 (AVERAGE RATES)

| Area | Still Births (per '000 total births) | Perinatal Mortality (per '000 total births) | Infant Mortality (per '000 live births) | | |
|---|---|---|---|---|---|
| | | | Neonatal | Post-Neonatal | Total |
| Halifax C.B. | 18.2 | 32.4 | 17.3 | 12.1 | 29.4 |
| (Index: E & W = 100) | (99) | (109) | (117) | (189) | (139) |
| Total Study Area | 19.0 | 30.0 | 15.3 | 10.7 | 24.7 |
| (Index) | (103) | (98) | (103) | (167) | (116) |
| Yorkshire & Humberside | 19.0 | 31.8 | 15.7 | 7.6 | 23.3 |
| (Index) | (103) | (104) | (106) | (119) | (110) |
| England and Wales | 18.4 | 30.6 | 14.8 | 6.4 | 21.2 |
| (Index) | (100) | (100) | (100) | (100) | (100) |

Note: Perinatal mortality refers to deaths within one week of birth (including still births).
The neonatal period is from 1 to 4 weeks from birth.
The post-neonatal period is from 4 weeks to 1 year from birth.

The local rates for still births and perinatal mortality do not deviate very widely from the national and regional rates. But the infant mortality rates are very much higher, particularly for the post-neonatal period. This is thought to reflect bad housing conditions in particular (see A Review of Yorkshire and Humberside, para. 389).

137. A third source of data on local health refers to the causes of incapacity for work. In the 12 months from June 1961 to June 1962, a nation-wide survey was carried out. The information available relates principally to men and includes the following aspects:

(a) men starting one or more new spells of incapacity in the period;

(b) man-days lost through incapacity.

The results for Halifax C.B., expressed as rates per thousand men, are shown in Table 42. They show that generally incapacity was considerably less serious in Halifax than in the country as a whole. Among the individual causes, only bronchitis was worse in Halifax, more particularly in respect of its duration. But in total, diseases of the respiratory system were less serious in Halifax than in England and Wales. These results do not prove that environmental conditions in Halifax have no unusually harmful effect on health; such effects could be masked for instance by the beneficial influence of the industrial structure, with its comparative absence of industries with special health risks. The importance of an occupational approach to the problem was stressed in A Review of Yorkshire and Humberside (Appendix 1). Nevertheless it should be noted that these data give no substantial support for the notion that the local environment has a particularly bad effect on health when compared with the situation in the country as a whole.

TABLE 42. PRINCIPAL CAUSES OF INCAPACITY FOR WORK (MALES) IN HALIFAX C.B. 1961-2 (12 MONTHS)

| Cause of Incapacity | Men starting one or more new spells of incapacity | | Man-days lost through incapacity | |
|---|---|---|---|---|
| | Rate | Index (G.B. = 100) | Rate | Index (G.B. = 100) |
| All causes | 248 | 88 | 7,568 | 85 |
| All diseases of the respiratory system | 110 | 77 | 2,625 | 92 |
| Acute upper respiratory infections | 28 | 60 | 323 | 62 |
| Influenza | 37 | 62 | 454 | 63 |
| Bronchitis | 39 | 105 | 1,482 | 120 |
| Arthritis and Rheumatism | 20 | 81 | 334 | 59 |

Note: The principal causes of incapacity are defined here as those which gave a national inception rate (i.e. men starting one or more new spells of incapacity) of at least 25 per thousand.

# 5. THE URBAN PATTERN

## LAND AVAILABILITY

138. The Ministry of Housing and Local Government has initiated a preliminary survey of land suitable for development with the co-operation of the Local Planning Authorities. Categories of land which are or could become available for residential development have been determined as follows:-

(i) Land allocated for residential use in Development Plans approved by the Minister, but which remained undeveloped in 1967.

(ii) "White land", considered suitable for development. ("White land" is land for which no specific proposals are made in the Development Plans for either development or preservation from development, for example, by inclusion in a green belt.) Land with any of the following characteristics has been excluded from this category:-

It is over 800 ft; it is a north-facing slope with a gradient in excess of 1 in 8, and is, therefore, shielded from the sun for much of the day; it is a slope other than north-facing, with a gradient of over 1 in 7; it has access difficulties and could only be developed with considerable expense on new or improved roads; or it is isolated from existing development.

(iii) "White land" which, while having some of the adverse characteristics just outlined, could be developed if a land shortage became acute.

139. On this basis, the preliminary assessments showed that almost 900 acres of land could become available in the study area, of which 43% is allocated but as yet unused. In addition to this, further land is expected to become available by redevelopment, and another source will be smaller "infilling" sites in areas which are already substantially built up. About 25% of the land which is likely to become available is in Halifax. The remaining acreage is fairly evenly distributed throughout the local authorities in the study area; this means that if land availability problems do arise, they may be more serious in the larger local authorities. These estimates, however, must be treated with some reservations as it is clearly impossible to carry out a detailed appraisal of every site. Some large sites included in the estimates are by no means ideal. For instance, much of the residential land on the northern periphery of Halifax is at about 1,000ft., and in Todmorden the principal sites included in the estimate are on isolated and exposed north-facing slopes.

140. Chapter 4 gives a range of possible targets for the local housing programme to 1981 (para. 110). The range is from 11,500 to 51,500 houses, depending on the assumptions made about future population migration and (especially) the rate of replacement of substandard dwellings. If we assume that in all clearance schemes half the number of houses cleared are replaced on the site, the range in terms of new dwellings requiring virgin land is reduced to between 5,000 and 29,500. Table 43 shows the acreage of land required for these

alternative targets. A medium requirement has been inserted between the two extremes. Alternative average densities of development have been assumed; these are gross densities, i.e. they include land uses such as schools and local shopping centres which are necessarily associated with residential areas. A range of 6 possible requirements is produced, from 330 to 2,950 acres.

TABLE 43. RESIDENTIAL LAND REQUIREMENTS TO 1981

| | Dwellings to be built on virgin land | Acreage required assuming the following gross residential densities (dwellings per acre):- | |
|---|---|---|---|
| | | 10 | 15 |
| 1. Lower 1981 population with minimum replacement (i.e. of statutorily unfit dwellings only) | 5,000 | 500 | 330 |
| 2. Lower 1981 population with medium replacement (i.e. of half the dwellings with a rateable value under £30) | 9,500 | 950 | 630 |
| 3. Higher 1981 population with maximum replacement (i.e. of all dwellings with a rateable value under £30) | 29,500 | 2,950 | 1,970 |

141. An estimate has also been produced of land which is or could become available for industrial use. Land has been included in this category if it is allocated for industrial use in approved Development Plans but remained undeveloped in 1967; together with any adjacent "white land" suitable for industrial development. About 175 acres are identified, mainly in Halifax and the eastern part of the study area. The demands of industrial land users cannot, however, be forecast accurately and it is impossible to draw any real conclusions about the adequacy of this supply. Some information about the experience of industrialists in the area is however available.

142. In the industrial survey, a question was asked about the adequacy of existing sites for present and foreseeable requirements. Of the 94 who replied, 18 firms considered their sites inadequate. This related either to lack of space for building or for storage etc. The principal deficiencies mentioned were as follows:-

| | |
|---|---|
| Inadequate land for buildings: | 18 mentions |
| " " " open storage, parking etc.: | 9 " |
| Poor approach road: | 5 " |
| Site required by local authority for redevelopment, etc.: | 4 " |

In the instances of inadequate land, it was more frequently the case that no suitable land adjoined the site rather than that suitable adjacent land existed but was in another ownership. Analysis of the replies by industry shows that inadequacies of site were experienced

mainly by industries other than textiles; only 2 out of 34 respondents in the textiles order of industries felt they had inadequate sites. (A similar pattern emerged in the enquiry about the adequacy of buildings: see above, para. 117.)

143. In Halifax a considerable amount of land still remains available on an industrial estate in the northern part of the town, and the undulating nature of the site may well be a factor deterring more rapid development. An estate nearer the centre of Halifax has been developed more rapidly and the local authority is also making provision for re-siting firms displaced by re-development schemes. On the eaetern side of Brighouse, an industrial estate has been developed rapidly, partly for warehousing, and will have the advantage of close proximity to the M62.

## URBAN STRUCTURE

144. In examining the urban structure of the study area, we are concerned with the disposition of the principal land uses - residential areas, industrial areas and town centres - in relation to the transport system. The discussion is limited to the basic features of the pattern of development since it is aimed only at providing an overall assessment of the potential of the urban structure for further development. We etop far short of providing an urban structure plan, which is the responsibility of the Local Planning Authorities, and which requires a detailed analysis of land use, traffic and of transport.

145. The pattern of settlement in the study area is one of many units, each with its own oentre aoting as the hub of its internal system of communications. Halifax is of oourse the largest, but it accounts for only 95,000 of the total population of 196,000. Most of the remaining 101,000 people live in the other medium and small size towns. Brighouse has a clearly radial road pattern, but the remaining towns are more constricted by the topography of the land and thus have either irregular forms or, as in the case of Todmorden, a distinctly linear structure. The valleys which meet here are very steep sided and the town has been able to develop only in narrow bands in three directions. The growth of Halifax hae been very radioally affeoted by the steep escarpment immediately to the east of the central area; the result is half-radial or fan-shaped development extending south, west and north-west from the centre.

146. This pattern of a number of distinct units taking a variety of forms ae dictated by the topography of the area is shown in Figure 17. Four principal elements in the urban structure are included - industrial areas, town centres, residential areas and the road network. The roads shown here are those that are used as bus routes: the main road and rail network is shown in Figure 3.

147. There are two further points to note. First, many of the towns are situated in a line along the Calder valley. Secondly, although the towns have generally well defined oentres providing shopping and other servioes, industrial sites tend to be scattered. Brighouse, with its concentration of induetry adjacent to the town centre in the valley is the principal exception. Although there is eome concentration of industry at the centre of Halifax there is nevertheless a oonsiderable number of important industrial buildings with many employees throughout the rest of the town.

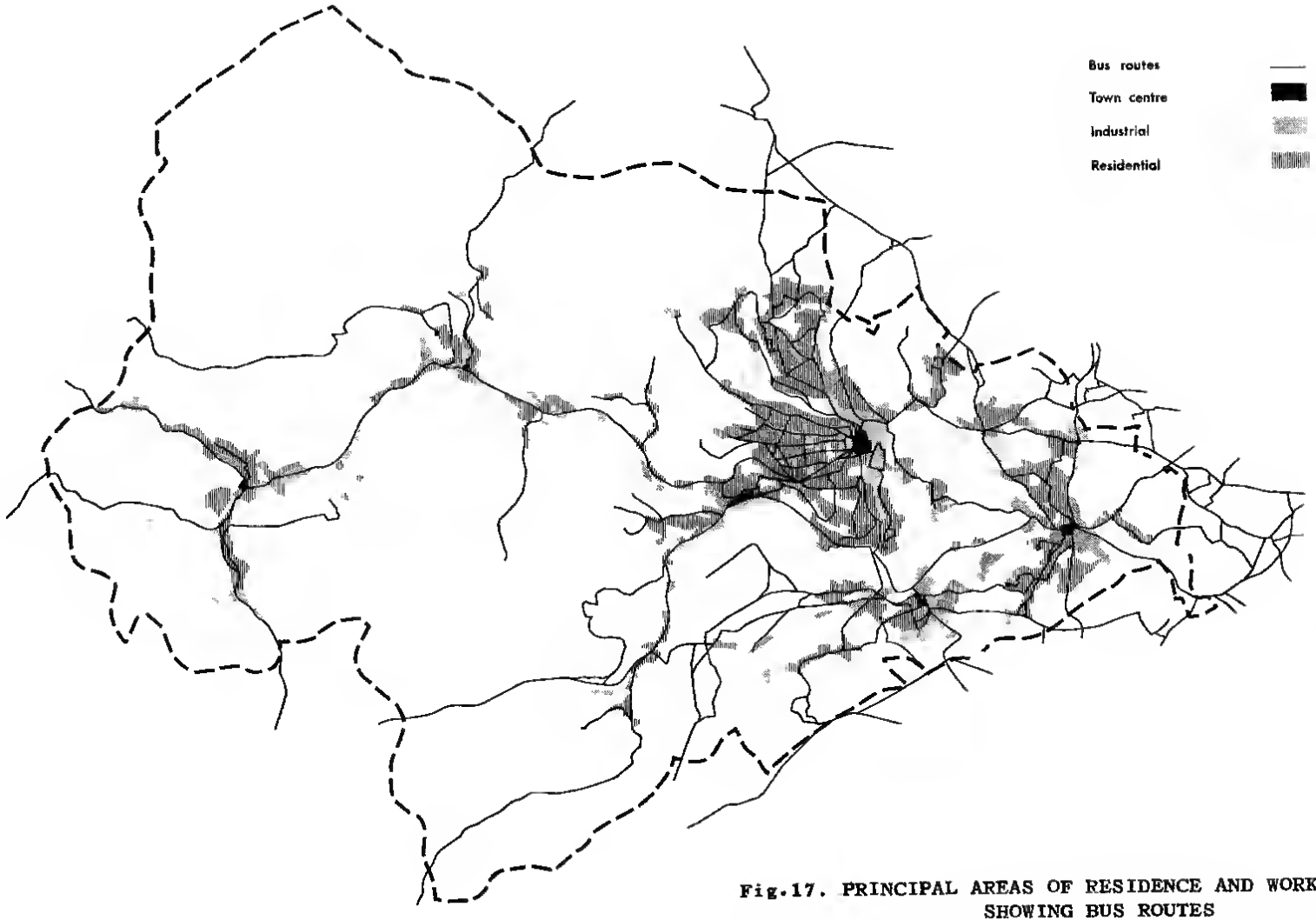


Fig.17. PRINCIPAL AREAS OF RESIDENCE AND WORKPLACE SHOWING BUS ROUTES

148. The study area as a whole has, therefore, a pattern of development with two significant characteristics:-

(i) a considerable degree of dispersion of those land uses which normally generate considerable traffic flows in relation to the area covered - town centres and industrial sites;

(ii) a tendency to linearity in the disposition of land uses, resulting from topographical restraints.

Brighouse is exceptional; it has a marked concentration of those land uses which generate intense traffic flows, and being in a less hilly area does not show the linear tendency so markedly, except in its main industrial area in the valley of the Calder. The question is: do these characteristics represent a resource which can be exploited either in the expansion of the area or in its reshaping (not necessarily accompanied by a marked expansion) to accommodate a more efficient urban economy? It is convenient to link an account of the road network with the discussion of dispersion, while considering the significance of the linear element in relation to the public transport system.

## DISPERSION AND THE ROAD NETWORK

149. A dispersed pattern of development normally favours the use of private cars. Ideally it should prevent the excessive build-up of traffic at any one point and allow a high level of private car usage without congestion. But a necessary condition is the existence of an adequate road network which allows easy access between any two parts of the area.

150. The existing road pattern of the study area does not fulfil this condition, nor could it be made to do so except at great expense. Topographical features have severely restricted the development of the road network. As a result there are many existing and potential points of congestion through which traffic is funnelled. Roads are often narrow and twisting with steep hills. All too frequently inter-urban traffic (much of it heavy industrial traffic) is forced to pass through the central area of a town.

151. Considerable improvements to the area's road system will be effected, either directly or indirectly, by schemes in the Ministry of Transport's programmes for motorways and principal roads, i.e.:-

(i) the Lancashire-Yorkshire Motorway (Route M62) now under construction;

(ii) the Halifax Inner Relief Road, due to be started in 1969-70;

(iii) the Elland By-Pass (Route A.629). This scheme will provide a dual carriageway by-pass on the east side of Elland from the motorway intersection at Ainley Top. It is expected to be started in 1969-70. (A further improvement of this route into Halifax - not yet in the programme, however - is expected to start in the early seventies);

(iv) a new road along the valley from the Elland By-Pass to Brighouse, the Commercial Street By-Pass in Brighouse, and the improvement of Route A.644 between Brighouse and the motorway intersection at Clifton. These schemes are expected to be

carried out in the early seventies. (It is intended that these improvements will link up with other improvements - though some are not yet in the programme - between Clifton and Dewsbury, to provide a route from Halifax to Brighouse, Dewsbury and Wakefield which will be dual carriageway throughout.)

Not in the Ministry of Transport's programme but under consideration is the improvement to dual carriageway standards of the trunk road A.58 from Halifax to the motorway intersection at Chain Bar, Cleckheaton.

152. The completion of the motorway will make no substantial direct contribution to the movement of local traffic since it will run along the southern boundary of the study area. But in diverting through traffic from the existing routes through the area - and most of the principal towns are affected - it is certain to have a beneficial effect on local traffic and environmental conditions. Brighouse and Elland should be relieved of much through traffic. At present the main traffic route through the study area is the Leeds-Halifax-Todmorden-Burnley trunk road (A.58 and A.646), which is heavily used as a trans-Pennine route in winter because of its comparative freedom from snow. Its importance in this respect is likely to be diminished when the M.62 is completed. Traffic now using this route through Halifax may be expected to be reduced by roughly 3,000 passenger car units per day when the motorway is open - though this reduction will of course be partly offset by the natural increase in road traffic volumes.

153. Consideration is being given to the improvement of the A.646 trunk road between Halifax and Todmorden to dual carriageway standards. This section is generally inadequate in respect of its width and alignment, running as it does along the bottom of the narrow and steep-sided valley of the Calder, which also accommodates a railway, a canal and a considerable amount of development. It may be possible to use the line of the disused Rochdale Canal to by-pass Mytholmroyd and Hebden Bridge, but for the rest the new road would be substantially following the existing line.

154. Programmed and other possible road schemes now under consideration will therefore go far to easing congestion, particularly by removing through traffic from town centres. Excluding the M.62, schemes in the programme for principal roads in the study area involve an investment of £11 million before 1971. The cost of the improvement of the A.58 trunk road from Chain Bar to Halifax and of the A.646 trunk road from Halifax to Todmorden, is provisionally estimated at £12 m. This programme will have a beneficial effect on the movement of local traffic and on the quality of the environment in the towns of the area. But apart from the Lancashire-Yorkshire Motorway these projected improvements will not alter the basic pattern of the area's road network; indeed, it is not to be expected that they would, because of the numerous physical barriers which exist in the area and the impossibility of changing the whole network over a limited span of years. Thus, while journeys between different parts of the study area may well be quicker, they will be little more direct, and to this extent the difficult topography of the area will prevent the full exploitation of the benefits which might otherwise be derived from the element of dispersion in the pattern of development. The exception is again the eastern part of the study area, where the radial pattern based on Brighouse is enclosed within a roughly rectilinear system.

## THE PUBLIC TRANSPORT SYSTEM

155. Like the road network, the pattern of public transport services in the study area is dictated largely by the terrain. Essentially the layout of the services consists of two radial patterns based on Halifax and Brighouse, and elsewhere of linear patterns which are best exemplified by the main route along the Calder valley itself. The linear pattern has some advantages for the public transport operator in that it permits the provision of concentrated high density services passing relatively close to most trip origins and destinations.

156. The railways currently in use are shown in Fig. 3. There are three railway routes serving the study area. The principal line is that from Leeds and Bradford to Manchester via Halifax, Sowerby Bridge, Mytholmroyd, Hebden Bridge, Todmorden and Rochdale. There is also a line from Sowerby Bridge down the Calder valley to Brighouse, Wakefield and York. Finally, there is a line from a point between Hebden Bridge and Todmorden to Burnley and North East Lancashire. Of these three routes, the first is by far the most important. It is designated by the British Railways Board as a "route selected for development" for both freight and passenger traffic. It has a frequent passenger service, mainly of diesel multiple unit stock. Most trains run from Leeds to Manchester, with some extensions to Liverpool. The service from Manchester via Sowerby Bridge to Wakefield and York is less frequent, and in fact the British Railways Board are ready to give notice of their proposal to withdraw this service. There is only one train a day in each direction between Hebden Bridge and Burnley (from Leeds to Blackpool in the morning and from Blackpool to Bradford in the afternoon), although there are more trains during summer weekends.

TABLE 44. PUBLIC TRANSPORT SERVICES, AUGUST 1967

| Journeys between:- | Rail | | | Bus | | |
|---|---|---|---|---|---|---|
| | No. of trains per day (Mon.-Fri., both directions) | Average time taken (mins) | Cheap day return fare (2nd class) | No. of through buses per day (Mon.-Fri., both directions) | Average time taken (mins) | Return fare (i.e. twice the single fare) |
| Sowerby Bridge and Halifax | 35 | 6 | 1s.4d. | 366 | 11 | 1s.6d. |
| Mytholmroyd and Halifax | 16 | 13 | 2s.3d. | 222 | 23 | 2s.6d. |
| Hebden Bridge and Halifax | 32 | 15 | 2s.5d. | 216 | 28 | 2s.10d. |
| Todmorden and Halifax | 34 | 22 | 4s.6d. | 8* | 42 | 4s.10d. |
| Todmorden and Manchester | 46 | 29 | 6s.6d. | 19+ | 60+ | 5s.6d.+ |

* In addition there are 126 buses per day in both directions between Todmorden and Hebden Bridge which connect at Hebden Bridge with buses to and from Halifax, the average wait at Hebden Bridge being five minutes.

+ Express service; in this case the return fare is less than twice the single fare.

157. It will be seen from Table 44 which compares frequencies, journey times and fares of rail and bus services for certain selected journeys along the Calder valley route above Halifax, that rail has a consistent advantage in journey times and return fares (except between Todmorden and Manchester) and even has an advantage in frequencies between Todmorden and Halifax (at least if only through buses are taken into account) and between Todmorden and Manchester. Moreover the railway stations at Mytholmroyd and Todmorden are fairly conveniently situated. On the other hand buses are very much more frequent between Halifax and Sowerby Bridge, Mytholmroyd and Hebden Bridge. Buses can get nearer to trip origins and destinations, especially around Halifax. This factor is particularly important in view of the dispersion of factories in Halifax; bus routes from the west pass within reasonable walking distance of a significant number of important factories before entering the central area. This contrasts with the rather inconvenient location of the railway station at Halifax, which is about half a mile from the town centre.

158. Between Halifax and Sowerby Bridge therefore, the bus has a clear advantage. Between Halifax and Mytholmroyd and Hebden Bridge bus and rail are more evenly balanced, though the bus probably still has an advantage. Between Halifax and Todmorden and between Todmorden and Manchester, however, rail has a very marked advantage. Indeed, the main value of this line to passengers in the study area would appear to be the service it gives to the remoter communities in the Calder valley.

159. An attempt has been made to assess the importance of the railway to these communities by comparing (a) the numbers of tickets issued at these stations for journeys to certain other stations with (b) the populations of the local authority areas within which the issuing station is situated. This measurement is certainly a crude one, particularly in equating local authority areas with the catchment areas of the stations. On the other hand the results almost certainly under-state the importance of the stations to the community because they are based only on journeys to other stations in the study area and on the most common journeys to stations outside it. The results are given in Appendix H. They show that taking 1966, the number of tickets issued per hundred population increased steadily with the distance up the valley, rising from 21 at Brighouse to 453 at Todmorden.

160. As a basis for future expansion of the Calder valley, the potential of the rail pattern would appear to be limited. Very little virgin land suitable for development is now easily accessible to existing stations; nor does the railway pass through any large areas of such land. This reduces the possibility of attracting into the area above Sowerby Bridge a significant number of commuters by rail to the large centres, particularly Manchester (25 minutes by the best train from Todmorden). The narrow and congested character of the Calder valley is the basic constraint preventing further large-scale residential development (at least of the conventional type) along the line of the railway.

161. On the other hand, the potential importance of the railway to Todmorden and to a lesser extent Hebden Bridge, would be of considerable significance to possible changes in their economic structure. The existence of a good service to other centres of employment widens the choice of jobs available to people already living in these towns. It means that the achievement of a careful balance of population and jobs in these areas is not necessarily a requirement of the first priority.

162. Turning now to the system of bus services, the linear elements in the pattern of development certainly assist the provision of frequent services passing close to the main origins and destinations. Again the benefits are probably clearest in the Calder valley above Sowerby Bridge, where most development is within a very short distance of the one main road (A.646) along the valley bottom. On a smaller scale, the Ryburn valley from Ripponden to Sowerby Bridge is also well suited to bus transport. Both these corridors lead into the radial pattern of Halifax. In Halifax and to a lesser extent in Brighouse, the radial arms of development tend to be very wide and irregular and consequently many more bus routes are required to serve the developed areas. This is demonstrated by the proliferation of routes (see Fig. 17), which contrast sharply with the single rail route from Todmorden to Halifax. The coverage of the study area by bus services is remarkably full and there are surprisingly frequent services even to some of the more outlying parts of the study area. Another important characteristic of the pattern of bus services is the strong influence of physical barriers, making some journeys somewhat circuitous. An example is the journey between the northern and western parts of Halifax - areas which contain many homes and important workplaces. There are, however, through bus routes between the northern and western areas which pass through the centre of the town. The barrier here is the steep sided and very narrow valley of the Hebble Brook.

## Relationship of the Study Area to other centres

163. There are a number of aspects of the relationship of the study area with other areas, and although some have already been mentioned, it is desirable at this point to bring them together. They are:-

(a) relationship to service centres outside the study area;

(b) industrial relationships;

(c) potential labour catchment;

(d) the potential of the area as a commuter area especially for Manchester.

The impact of the M.62 on the area is discussed separately in the final section of this chapter.

## RELATIONSHIP TO SERVICE CENTRES

164. It is clear that the proximity of larger centres within easy travelling distance is important to the area, and further light is shed on the relative roles of Bradford, Leeds and Manchester by data on rail ticket issues from stations in the study area. There are also frequent bus services to Bradford, Leeds and Huddersfield and an hourly service to Manchester. Unfortunately, however, no information is available for the total number of bus passengers on these routes, comparable to that available for rail, because modern bus-ticket issuing machines do not allow the collection of this kind of information. Thus the information about the total number of rail passengers is an incomplete guide; journeys by bus and private car might show a different pattern. Moreover, no data about the purpose of the journeys undertaken are available.

165. The pattern of passenger movement by rail is shown in Fig. 18. This suggests strong links by rail at least, with both Bradford and Leeds, with Manchester being particularly important for Todmorden. The relevant journey times (fastest services) from Todmorden are:-

| | | |
|---|---|---|
| Todmorden | - Manchester | 25 minutes |
| " | - Rochdale | 10 " |
| " | - Halifax | 20 " |
| " | - Bradford | 35 " |
| " | - Leeds | 58 " |

From Halifax, the fastest journey times are as follows:-

| | | |
|---|---|---|
| Halifax | - Bradford | 12 minutes |
| " | - Leeds | 33 " |
| " | - Rochdale | 25 " |
| " | - Manchester | 40 " |

Unfortunately it is impossible to use this data as a guide to the relative importance of Huddersfield as a service centre for the study area since there is no rail service which could serve this purpose.

## INDUSTRIAL RELATIONSHIPS

166. Easy access to major centres benefits industry as well as the individual consumer. The benefits to industry extend further in two directions - linkages in the production process and the advantages of having a large market near at hand. In Chapter 3 (paras. 48-51) an assessment was made of the importance of linkages between establishments in the study area both within the area itself and within the wider areas of the West Riding and Lancashire industrial complexes. In the replies to the industrial survey these advantages were frequently mentioned, as also was the advantage of a location within easy reach of the principal markets of the north of England. Fig. 22 shows that even before the completion of the M.62, a one hour road journey from Brighouse covers the complete West Riding conurbation and reaches the suburbs of both Manchester and Sheffield.

## POTENTIAL LABOUR CATCHMENT

167. The importance to employers of their ability to draw on a sizeable population for labour was discussed in Chapter 2 (paras. 30-33). The present apparent unwillingness of labour to travel very far between home and workplace and the comparatively low level of daily movement over the study area boundary do not eliminate the potential benefits of greater mobility in the future although employers may have to offer incentives to encourage workers to take employment further away from home. Estimates have been made of the total population within five and ten miles of the centres of towns in the study area. (Table 45.) The outstanding feature of the results is the great contrast between the eastern and western parts of the study area. Within five miles of the centre of Brighouse lives a population of some 370,000. The town is strategically placed between Halifax, Bradford, Dewsbury and Huddersfield. Road communications are not good but will improve, and it should therefore be feasible

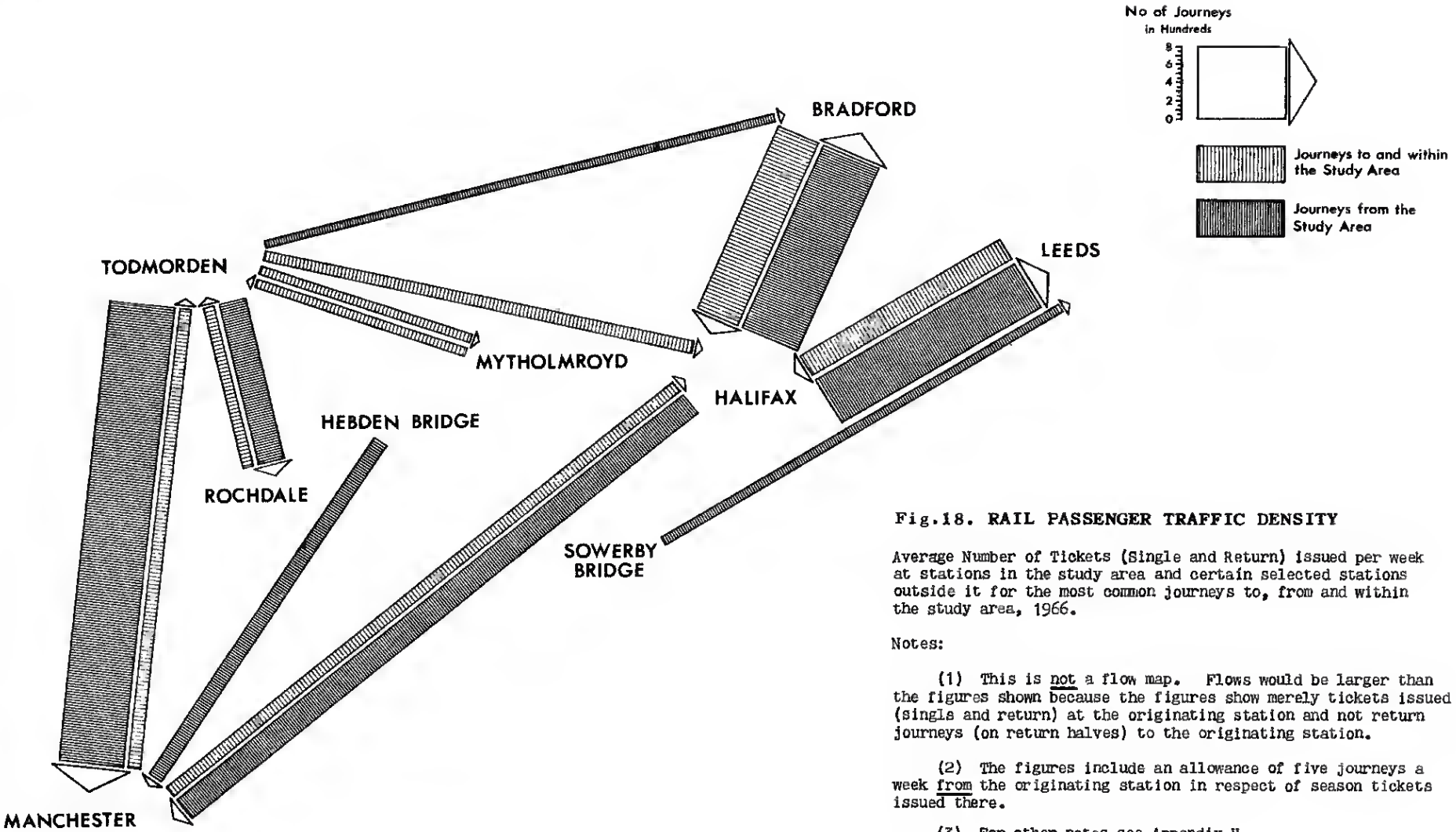


**Fig.18. RAIL PASSENGER TRAFFIC DENSITY**

Average Number of Tickets (Single and Return) issued per week at stations in the study area and certain selected stations outside it for the most common journeys to, from and within the study area, 1966.

Notes:

(1) This is not a flow map. Flows would be larger than the figures shown because the figures show merely tickets issued (single and return) at the originating station and not return journeys (on return halves) to the originating station.

(2) The figures include an allowance of five journeys a week from the originating station in respect of season tickets issued there.

(3) For other notes see Appendix H.

for an industrialist located there to draw upon a very substantial labour force. Within a ten mile radius, the population approaches one million. Halifax has 275,000 population within five miles - three quarters of the number within a similar radius of Brighouse. Within ten miles is a population of 900,000, a catchment almost as large as that of Brighouse.

TABLE 45. ESTIMATED POPULATIONS WITHIN FIVE AND TEN MILES OF CERTAIN POINTS

| Location (town centre) | Estimated 1961 population ('000s) within the following radii:- | |
|---|---|---|
| | five miles | ten miles |
| Brighouse | 370 | 940 |
| Elland | 275 | 780 |
| Halifax | 280 | 900 |
| Sowerby Bridge | 190 | 740 |
| Hebden Bridge | 75 | 440 |
| Todmorden | 70 | 540 |

168. The size of the populations within five miles of Hebden Bridge and Todmorden are by comparison very small - some 70-75,000 in each case. However, within a ten mile radius the populations rise to some half million; although it should be noted that in this area in particular the actual distances which need to be covered are considerably greater than the radius and there are considerable physical difficulties arising from the hilliness of the area.

POTENTIAL COMMUTER AREA

169. The location of the study area near to large urban centres raises the possibility of people with employment in those centres choosing to live in the area. The 1961 census data shows little significant daily movement to work in Leeds and a very small movement of about 60 persons from Todmorden to Manchester. The movements to Bradford and Huddersfield were roughly balanced by movements in the opposite direction. (See Fig. 8.) With the shortage of suitable building land, the poor quality of the stock of houses and the existence of well-established commuter areas elsewhere, it is difficult to foresee the area attracting commuters in any great numbers notwithstanding the good rail service. The one exception is Brighouse, to which the completion of the Lancashire-Yorkshire Motorway may well attract some commuters.

## The Impact of the M.62

170. The Lancashire-Yorkshire Motorway (M.62), which will follow the southern boundary of the study area, is now (1968) under construction. The section from Worsley (west of Manchester) to Lofthouse (south of Leeds and on the London-Yorkshire Motorway, M.1) is due for completion by 1972. The completion of this route could have a dramatic effect on communications to and from the study area. It could well act as a unifying influence between the towns of the West Riding and those

of South-East Lancashire. Its most notable effect could be on places like Brighouse, which it will place close to the centre of gravity of the whole motorway system in the North of England.

171. There will be a number of junctions with the local road system (see Fig. 3):-

(a) Milnrow (with route A.640) - just outside the study area to the west;

(b) Windy Hill (with route A.672);

(c) Outlane ( " " A.640);

(d) Ainley Top ( " " A.629);

(e) Clifton ( " " A.644);

(f) Chain Bar ( " " A. 58) - just outside the study area to the east.

The junctions at Ainley Top, Clifton and Chain Bar will be of particular value to the study area. The latter will be the natural point of interchange with the motorway for traffic between Halifax and the eastern part of the conurbation, the London-Yorkshire motorway (M.1), the Great North Road (A.1) and Humberside.

172. The motorway is expected to carry both inter-regional traffic and inter-urban traffic between the towns of the West Yorkshire conurbation. Estimates of the likely direct and indirect effects upon traffic flows in the conurbation are being made by consultants who are carrying out a land use/transportation study of West Yorkshire. It is clear that these flows will be considerable since the motorway runs east and west through the centre of the conurbation where there are already dense flows of inter-urban traffic.

173. In order to assess the effect upon travel between the study area and other centres, estimates have been made of the areas falling within certain specified journey times (a) before and (b) after the completion of the motorway. The results are shown in Figs. 19-24. The basic assumptions as to speed are:-

(a) average speed on motorways has been assessed as 50 m.p.h. - probably rather low for cars but a fair assumption for heavy goods vehicles;

(b) average speed on other roads has been assessed as 30 m.p.h. with some allowance made for delays in towns.

The 1967 analysis is based on the M.1 terminating at Nottingham, and the "after completion" date is based on the M.62 intersecting with the M.1 at Lofthouse (Leeds) and extending to Humberside. It is also assumed that the other motorways shown on the maps will be completed by the time the M.62 is completed.

174. Two pairs of terminal points in the study area have been selected for the purpose of this analysis - Halifax/Sowerby Bridge and Brighouse/Elland. The first are some 5 miles from the nearest motorway intersection, whilst the second almost adjoin intersections. This contrast makes a considerable difference to the shorter journey times. For the 20 minute journey, the motorway will make little impact on the area covered from Halifax. But in the case of Brighouse, the effect is to

bring in most of the eastern portion of the conurbation including Leeds, Wakefield and Dewsbury (Fig. 19). Figure 20 shows the 30 minute journey from Halifax. The effect of the completion of the M.62 is marginal although it does bring Leeds within the half-hour journey time. For Brighouse and Elland, however, the effect is very marked (Fig. 21). The area extends from beyond Pontefract in the east to the northern suburbs of Manchester in the west. The implications of the results for Brighouse and Elland are very considerable. The area within easy car commuting distance is greatly enlarged with the completion of the motorway - an extra area, predominantly urban in character, with a population of about a million is brought within a half-hour journey.

175. Figure 22 shows places within one hour's journey of Brighouse before and after completion of the motorway. The extra area brought in includes Doncaster and Sheffield, and the approaches to both Liverpool and Preston, i.e. the whole of the industrial West Riding and most of industrial Lancashire come within one hour's journey. For the 2 hour and 4 hour limits (Figs. 23-4) the difference between Halifax and Brighouse as termini becomes less significant. After completion of the motorway it will be possible to make two return journeys a day to Merseyside, Humberside, Nottingham, Derby and Leicester and to the approaches to Teesside and the Birmingham conurbation. Fig. 24 shows the area covered in 4 hours - a reasonable limit to regular return journeys within the day. The principal gain is to the south where both London and Bristol are brought just within this limit. It will thus be possible to make daily return journeys to these centres which are certainly not possible now.

176. In the industrial inquiry, firms were asked whether from their knowledge they considered that the completion of the M.62 would affect them significantly. Answers were as follows:-

| | |
|---|---|
| Yes | 52 |
| No | 33 |
| Don't know | 13 |
| | 98 |

Those answering "yes" were asked to indicate in which ways they would be affected. The replies are analysed in Table 46.

TABLE 46. EFFECT OF THE M.62 ON FIRMS IN THE STUDY AREA

| Effect | No. of firms considering the effect to be significant | |
|---|---|---|
| | Goods | Personal journeys on business |
| Better access to West Yorkshire and/or S.E. Lancs. | 44 | 40 |
| Better access to ports | 34 | 14 |
| Better access to national trunk routes | 42 | 41 |
| Other | 9 | |

It is clear that the benefits of better access to West Yorkshire, S.E. Lancashire and the national trunk route system generally are widely appreciated, both for the movement of goods and personal journeys on

business. The improved movement of goods to ports is also recognised as a significant benefit by a considerable number of firms (34 out of a total sample of 98). The "other" benefits listed were in effect amplifications of the foregoing - i.e. that "better access" meant reduced costs resulting from savings in time, less wear and tear on vehicles, better utilisation of vehicles and greater reliability. The easier crossing of the Pennines in the winter was also mentioned.

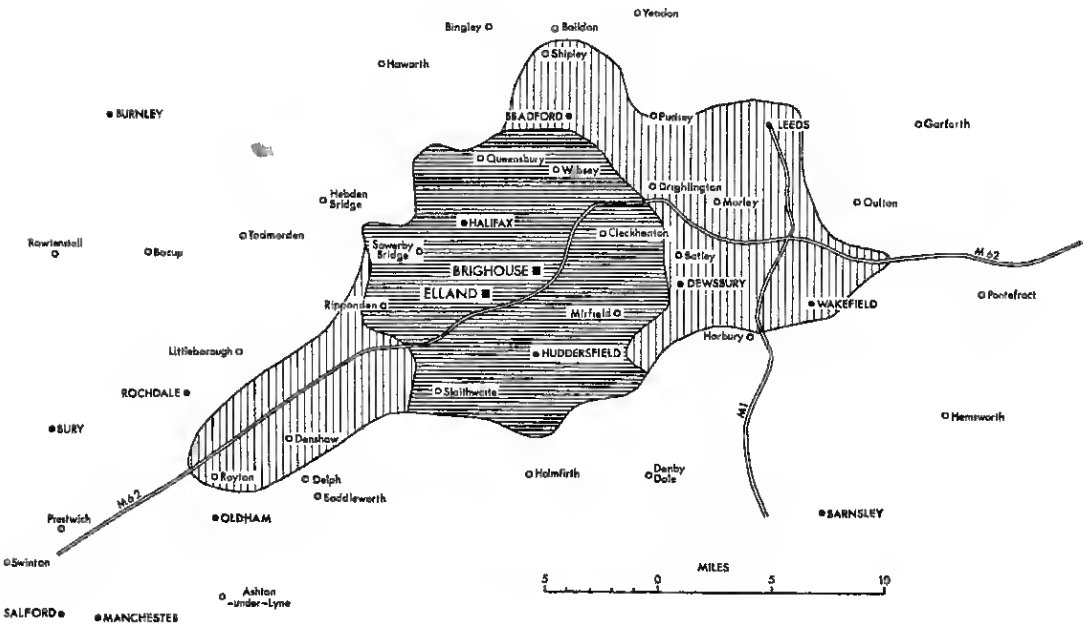


**Fig.19. THE EFFECT OF M62 - SHOWING PLACES WITHIN 20 MINUTES OF BRIGHOUSE OR ELLAND**

(a) now (inner shaded area) and (b) when the Lancashire - Yorkshire Motorway (M62) is completed (outer shaded area).

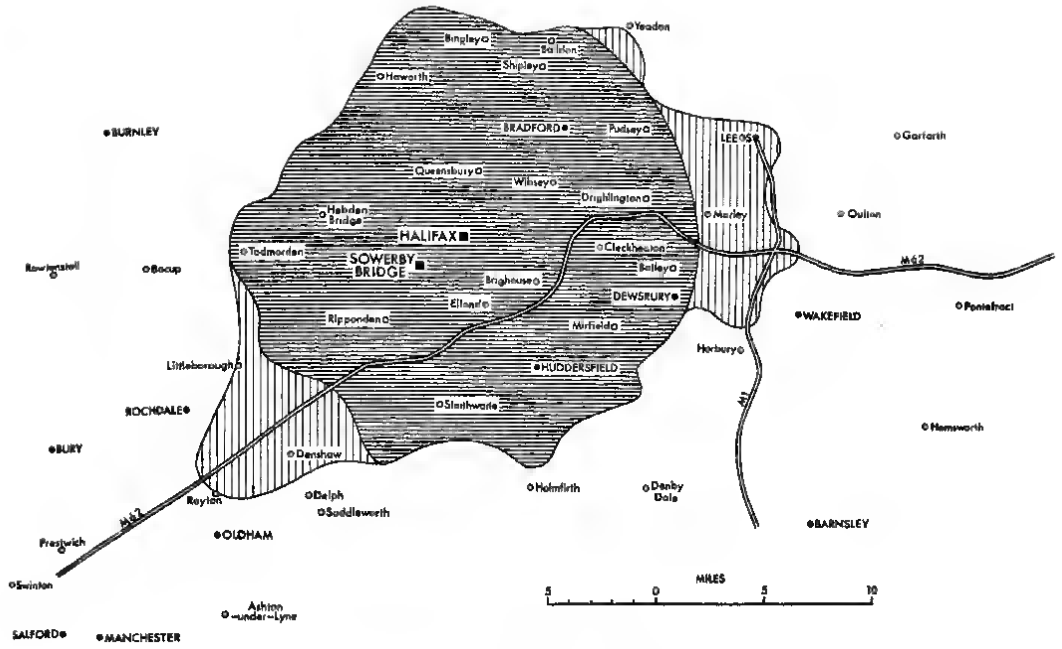


**Fig.20. THE EFFECT OF M62 - SHOWING PLACES WITHIN 30 MINUTES OF HALIFAX OR SOWERBY BRIDGE**

(a) now (inner shaded area) and (b) when the Lancashire - Yorkshire Motorway (M62) is completed (outer shaded area).

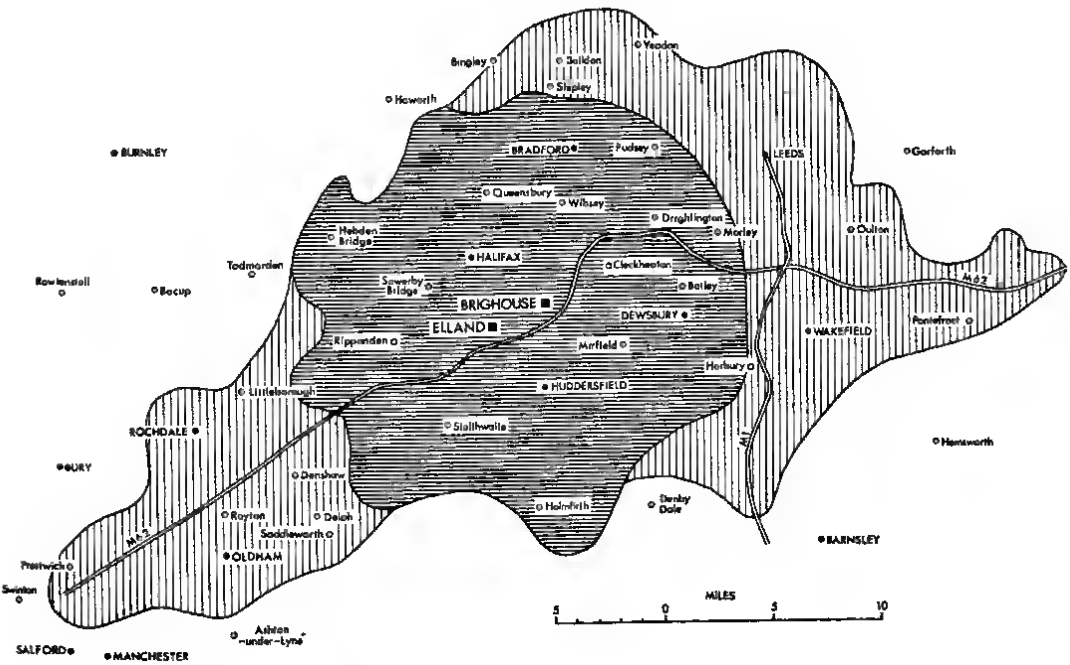


**Fig.21. THE EFFECT OF M62 - SHOWING PLACES WITHIN 30 MINUTES OF BRIGHOUSE OR ELLAND**

(a) now (inner shaded area) and (b) when the Lancashire - Yorkshire Motorway (M62) is completed (outer shaded area).

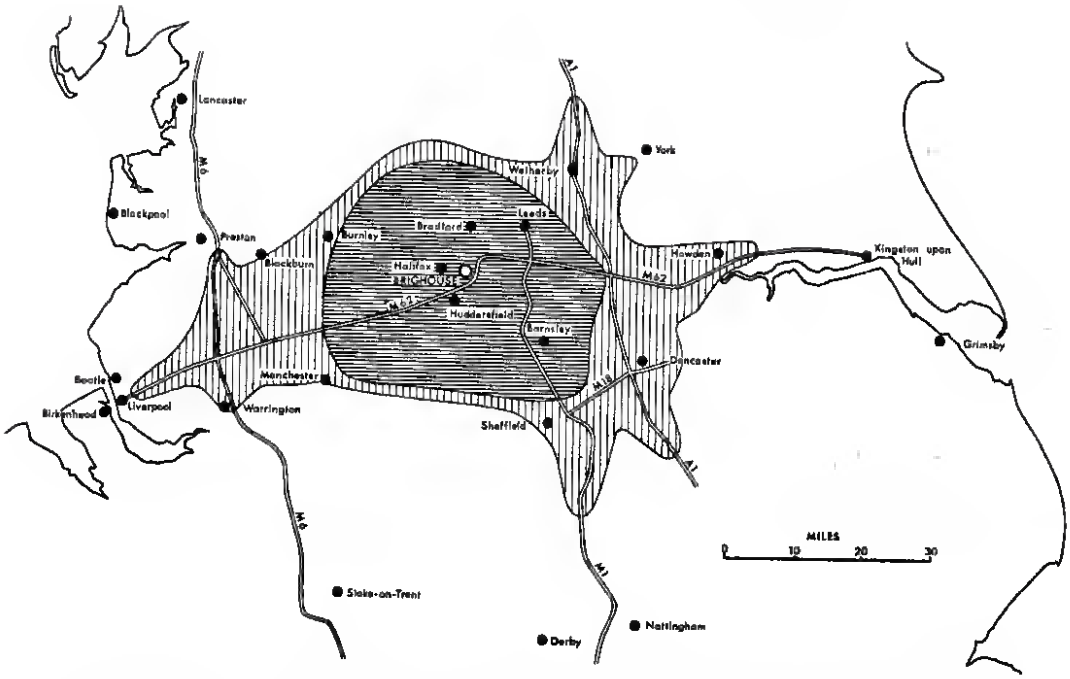


**Fig.22. THE EFFECT OF M62 - SHOWING PLACES WITHIN 1 HOUR OF BRIGHOUSE**

(a) now (inner shaded area) and (b) when the Lancashire - Yorkshire Motorway (M62) is completed (outer shaded area).

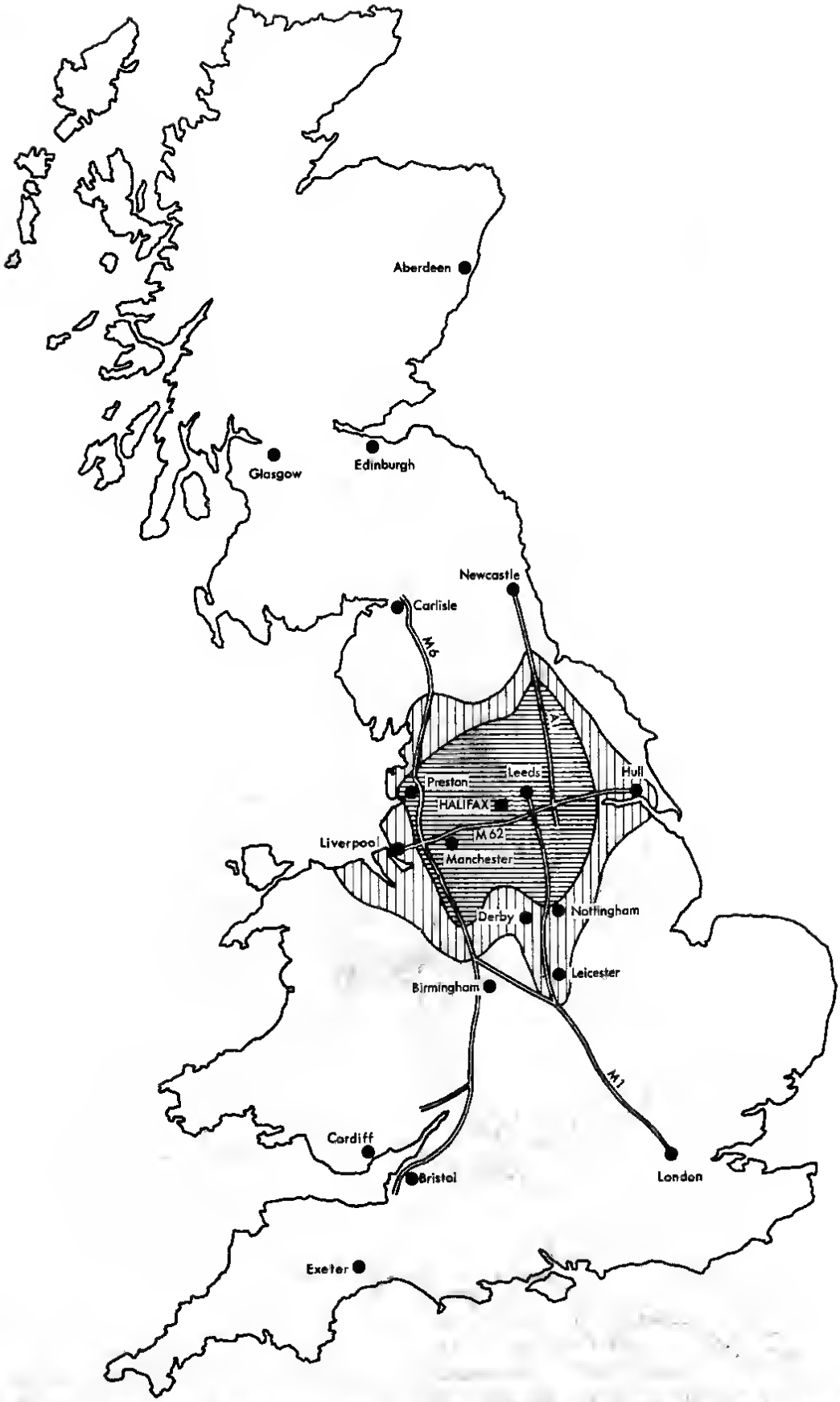


**Fig.23. THE EFFECT OF M62 - SHOWING PLACES WITHIN 2 HOURS OF HALIFAX**

(a) now (inner shaded area) and (b) when the Lancashire - Yorkshire Motorway (M62) is completed (outer shaded area).

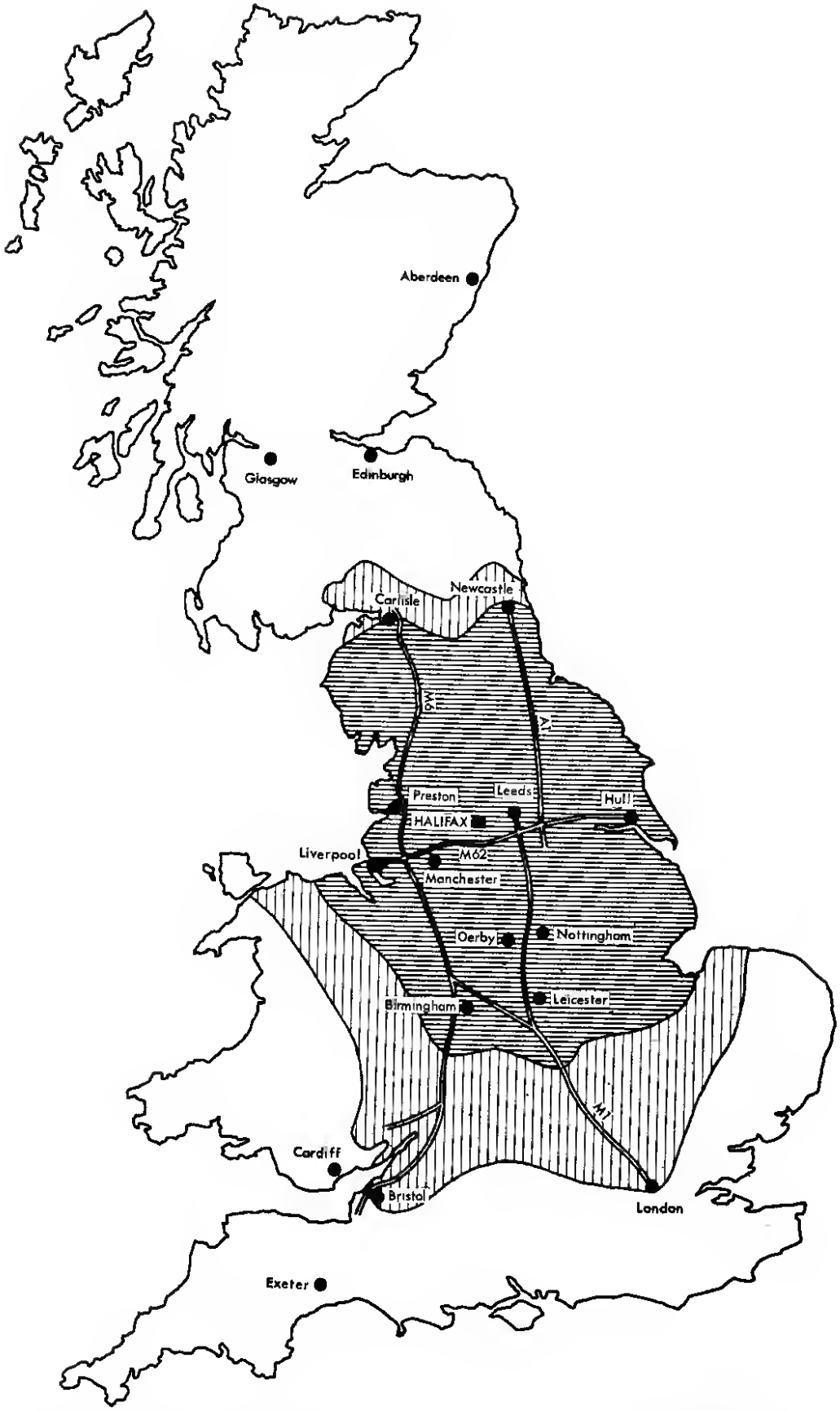


**Fig.24. THE EFFECT OF M62 - SHOWING PLACES WITHIN 4 HOURS OF HALIFAX**

(a) now (inner shaded area) and (b) when the Lancashire - Yorkshire Motorway (M62) is completed (outer shaded area).

# 6. ASSESSMENT AND POINTERS TO THE FUTURE

177. We now bring together the findings of the previous chapters. First an assessment is made of the economic, social and physical features of the study area as revealed by the survey, each item being assessed individually by reference to a simple scale. The second part of this chapter is devoted to an examination of existing trends and other pointers to the future. This includes discussion of the inter-relationship of the various features assessed in the first part.

## ASSESSMENT

178. The bulk of this report has been devoted to assessments of the various features of the study area which bear upon its future development. These can be grouped into the following main components:-

A. Human resources (Chapter 2);

B. Employment (Chapter 3);

C. Environment and the building stock (Chapter 4);

D. Land availability, urban structure and locational potential (Chapter 5).

These various aspects are now assessed in accordance with a simple five-point scale, viz:-

1. high

2. medium - high

3. medium

4. medium - low

5. low

In some cases it would be possible to rank particular items in a more precise way: but since the objective is to bring together as many factors as possible on to a common basis, it is necessary to keep to a uniformly simple scale.

179. This method produces a set of relative assessments which may be useful in the formulation of a regional strategy for the area in the following way. If all the assessments are "high", this would indicate a generally high growth potential and in terms of strategy, a high rate of population growth and investment would be suggested. If, however, all but one of the assessments are "high", because the factors are essentially interlinked, the factor with a lower rating will act as a brake on growth; so that the otherwise high potential of the area cannot be fully realised and resources are thereby likely to be wasted. In such a case the strategy suggested would be to seek a practicable method of removing this particular obstruction to growth - i.e. in such a way that the benefits gained from the consequent realisation of growth potential outweigh the costs incurred. This example is, of course, simpler than a real situation, but the approach remains valid even if the picture is complex. Indeed, it is precisely because there are many factors involved that a simple technique of this sort is of value.

180. No attempt is made to allocate numerical weights to the various assessments, although it is clear that some factors are far more important than others. One refinement however, has been made. In a number of cases, significant variations have been found as between the different parts of the study area. Where these occur, separate assessments are made using the following symbols:-

B: Brighouse and the eastern extremity of the study area

H: Halifax and the central part of the study area

T: Todmorden and the western part of the study area.

It should be noted, however, that no attempt has been made to carry out a complete analysis for sub-divisions of the study area.

181. A final preliminary point to be noted is that where appropriate, assessments are related to a national norm. It is considered that it is within a national rather than a regional context that some of the most significant economic decisions are taken - e.g. the industrialist determining the location of his investment in fixed capital or the young adult skilled worker deciding to migrate from one town to another.

182. With this general introduction to the method, each of the main features referred to in para. 178 are now discussed with reference back to the appropriate passage in earlier chapters. The resulting assessments are brought together in Table 47.

## A. HUMAN RESOURCES

### 1. FUTURE POPULATION OF WORKING AGE ASSUMING NO MIGRATION (para. 25)

183. The size of the population of working age in England and Wales is expected to fall by 1971, but increase in the period 1971-81. The indications are that the numbers of people in the working-age groups in the study area will fall in both periods even if no allowance is made for migration. This total picture is likely to be made up of an increase in males being cancelled out by a decrease in females.

Assessment: (a) male; medium

(b) female; medium-low

### 2. FUTURE POPULATION OF WORKING AGE WITH MIGRATION TREND (para. 26)

184. As recent net losses of population by migration have been substantial, the assumption that these will continue at the recent rate produces reductions in the numbers of both men and women.

Assessment: (a) male; medium-low

(b) female; low

3. SIZES OF LABOUR CATCHMENTS (paras. 30-33)

185. At present there is comparatively little daily movement of labour between communities so that labour catchments tend to be small. This is particularly the case at the western end of the study area. The recruitment of female labour outside the study area (para. 59) using special buses extends, in a special and limited way, the area from which female labour is drawn. (Note: the potential sizes of labour catchments are discussed in paragraph 213 below.)

Assessment: generally medium-low but low for the western end of the study area

4. TYPE OF LABOUR AVAILABLE

(a) existing age-structure (para. 35)

186. There is a significant bias towards an old age structure for both men and women in the working age-groups.

Assessment: for both male and female, medium-low

(b) socio-economic groups (males) (para. 36)

187. Allowing for the fact that this is essentially a manufacturing area, the breakdown of the population according to socio-economic group shows a structure similar to the national. The proportions in the managerial and professional groups in the study area and in England and Wales were identical in 1961.

Assessment: medium

(c) age on completion of full-time education (para. 37)

188. For both males and females, the proportion of the adult population who had received full-time education until the age of 17 or older was very low compared with the national level.

Assessment: (male and female): low

5. PUPILS REMAINING AT SCHOOL AFTER THE AGE OF 15 (para. 38)

189. As an indication of the educational attainment of school leavers in the area, this measurement shows the study area position to be similar to the national one.

Assessment: medium

6. COMMUNITY LIFE (paras. 27-29)

190. Although difficult to measure, there are a number of indications that community life in the area is very well developed.

Assessment: medium-high

## B. EMPLOYMENT

7. JOBS: NUMBER (para. 77 and Appendix E)

191. Overall, the demand for labour is expected to decrease over the next few years. The demand for female labour is likely to fall considerably, while the demand for male labour will probably remain steady or increase slightly.

Assessment: (a) male; medium
(b) female; medium-low

8. AVAILABILITY OF JOBS AND OF LABOUR (paras. 52-65 and 75-79)

192. Examination of both the present and likely future labour markets shows that for the individual worker it is generally easy to find a job while for the employer it is generally difficult to find an employee. It should be noted that this assessment is wholly quantitative.

Assessment: (a) availability of jobs; medium-high
(b) availability of employees; medium-low

9. WAGES AND EARNINGS (paras. 67-69)

193. The indications are that the level of earnings may be substantially lower in the study area than in the country as a whole.

Assessment: medium-low

10. JOB STABILITY AND PROSPECTS (paras. 70-72)

194. There is evidence of some degree of uncertainty about employment prospects, lower salary levels and a restricted range of employment. Working conditions would appear to be generally below par.

Assessment: medium-low

11. TRAINING FACILITIES (paras. 73-74)

195. Training facilities in local industries are generally good and compare well with other areas.

Assessment: medium-high

## C. ENVIRONMENT AND THE BUILDING STOCK

12. CLIMATE (paras. 82-85)

196. The climate of the area is certainly less agreeable than elsewhere although the significance of this should not be exaggerated

Assessment: medium-low

13. POLLUTION (paras. 86-88)

197. Considerable progress has been made in the abatement of atmospheric pollution, but the problem has not been eliminated.

Assessment: medium-low

14. DERELICTION AND DILAPIDATION (paras. 89-90)

198. Outright dereliction - large areas of unsightly waste land - is not a serious problem. There is, however, a general air of dilapidation in the area.

Assessment: medium-low

15. LANDSCAPE AND RECREATION (paras. 91-93)

199. The Pennines provide a valuable resource in terms of pleasant landscape and possibilities for outdoor recreation. Urban recreational facilities of the "bright lights" variety are necessarily limited in a town of the size of Halifax, but are available in larger centres within easy travelling distance. The towns of the area certainly have a character and identity of their own.

Assessment: medium-high

16. THE BUILDING STOCK: HOUSING (paras. 98-103)

200. A number of indicators of the quality of the housing stock - statutory unfitness, domestic arrangements, rateable value, number of back-to-back houses, proportion of houses built since 1945 - all indicate an extremely bad situation.

Assessment: low

17. THE BUILDING STOCK: INDUSTRIAL BUILDINGS (paras. 112-120)

201. The indications are that while there is an ample supply of industrial buildings these are generally old and frequently difficult to adapt to the needs of modern industry.

Assessment: (a) quantity: medium-high

(b) quality: medium-low

18. THE BUILDING STOCK: OTHER BUILDINGS (para. 121)

202. Although the rateable value per head of other buildings is low in the study area, this probably reflects a general lack of service industries. It is not possible on the evidence available to assess quantity and quality separately.

Assessment: medium

19. PUBLIC UTILITIES (para. 124)

203. There is no evidence of any serious deficiency in the provision of public utilities.

Assessment: medium

20. EDUCATION SERVICES (paras. 125-128)

204. The indicators used - awards to attend universities, oversize classes and the quality of school buildings - show a rather better standard of education services than the national average.

Assessment: medium-high

21. HEALTH SERVICES (paras. 129-132)

205. An examination of the provision of hospital services, doctors, dentists, domiciliary services and health and welfare premises shows that the level of provision is comparable to the national level.

Assessment: medium

22. HEALTH AND ENVIRONMENT (paras. 133-137)

206. An examination of health statistics shows that absence from work through ill-health is no more serious than in the country as a whole. Although the local mortality rate (corrected for age) is high, the reasons for this are by no means clear and there is no evidence of any harmful effect of the environment on health.

Assessment: medium

## D. LAND AVAILABILITY, URBAN STRUCTURE AND LOCATIONAL POTENTIAL

23. LAND AVAILABILITY (paras. 138-143)

207. A survey of land suitable for development shows that this is limited to only 900 acres in the whole area because of the effect of such factors as high altitude, steep slope and green belt areas.

Assessment: low

## 24. URBAN STRUCTURE (paras. 144-162)

208. The physical difficulties of the study area prevent the full potential of the existing pattern of development being realised. The narrowness of the Calder valley west of Halifax prevents linear development (which might otherwise make use of the railway) while the hilly terrain constricts the general movement of road traffic. The situation is more satisfactory in the eastern end of the area, where the physical difficulties are less.

Assessment: eastern end: medium
remainder of the study area: medium-low

## 25. INTERNAL COMMUNICATIONS (paras. 149-154)

209. Consideration of the internal communications of the area as part of the infrastructure suggests a below-average rating at present. Roads tend to be narrow, steep and twisting, with routes frequently passing through town centres. The improvements included in the road programme will, however, make a considerable improvement to the central and eastern parts of the area. Schemes in the programme for principal roads will involve an investment of £11m. in the period to 1971. In the western part of the area, the railway is an important element in the communications system and to a certain extent offsets the inadequacies of the local roads.

Assessment: (a) existing: medium-low

(b) including projects in the road programme: medium high - except in the western end of the area, which is assessed medium-low

## LOCATIONAL POTENTIAL

210. The resources represented by the following items will in varying degrees be augmented by the completion of the M62 (paras. 170-176) for which allowance has been made in the assessments.

## 26. RELATIONSHIP TO SERVICE CENTRES (paras. 164-165)

211. The proximity of the area to major urban centres - Bradford, Huddersfield, Leeds and Manchester - is an important asset which not only does much to offset the below-average provision of service industries in the study area itself, but also enables the area to draw conveniently upon specialised services which can only be supported by a much larger population. The completion of the M62 will favour in particular the eastern end of the study area in respect of movement to Manchester and Leeds. The effect on the western end will, however, be relatively small, although it is important to note that there is a good rail service to and from Manchester.

Assessment: eastern end: medium-high

remainder: medium

27. INDUSTRIAL RELATIONSHIPS (para. 166)

212. Industry in the study area benefits from its location in the large concentration of industry and population represented by the industrial West Riding and Lancashire; first, in respect of local linkages (as in the textiles industry) and secondly in large markets near at hand. Again, the M62 should increase these benefits by improving accessibility within this larger area.

| | | |
|---|---|---|
| Assessment: | eastern end: | high |
| | centre: | medium-high |
| | western end: | medium |

28. POTENTIAL LABOUR CATCHMENT (paras. 167-168)

213. The size of the population living within easy travelling distances of various points in the study area increases markedly from west to east. The differential will be increased further by the completion of the M62.

| | | |
|---|---|---|
| Assessment: | eastern end: | medium-high |
| | centre: | medium |
| | western end: | medium-low |

29. POTENTIAL COMMUTER FUNCTION (para. 169)

214. There appears to be little likelihood of people with employment in the large cities outside the study area coming to live locally in significant numbers. The potential of the western end of the study area for commuting to Manchester using the rail service is limited by the shortage of land for development. The eastern end, however, might become attractive to commuters by car using the M62 (para. 174).

Assessment: medium-low

(Note: Unlike the previous this does not act as a brake on growth if rated low - i.e. there is no reason why the very limited possibilities of Halifax developing this function should impair growth based on the development of other resources.)

TABLE 47. ASSESSMENT

Scale ussd for assssment; 1 - high; 2 - medium/high; 3 - medium; 4 - medium/low; 5 - low.

Notstion: X = complets study ares. Where separate assessments are made for particular parts of the area, B = Brighouse and the eastern end of the atudy area; H = Halifax and the central part; T = Todmorden and the west part.

For commentary, see text.

| Item No. | Itsm | Assessment | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| | A. Human Resources | | | | | |
| 1(s) | Future populstion of working age assuming no migration : Male | | | X | | |
| (b) | " " " " " " " " : Female | | | | X | |
| 2(a) | Future population of working age with migration trend : Male | | | | X | |
| (b) | " " " " " " " " : Female | | | | | X |
| 3 | Sizes of labour catchments | | | | BH | T |
| 4(a) | Type of labour - existing age structure | | | | X | |
| (b) | " " " - socio-economic groups (males) | | | X | | |
| (c) | " " " - age on completion of full-time education | | | | | X |
| 5 | Pupils remaining at school after the age of 15 | | | X | | |
| 6 | Community life | | X | | | |
| | B. Employment | | | | | |
| 7(a) | Jobs: Number : Male | | | X | | |
| (b) | " " : Female | | | | X | |
| 8(s) | Availability of jobs and labour : jobs | | X | | | |
| (b) | " " " " " : labour | | | | X | |
| 9 | Wages and earnings : Male | | | | X | |
| 10 | Job stability and prospects | | | | X | |
| 11 | Training facilities | | X | | | |
| | C. Environment and the Building Stock | | | | | |
| 12 | Climate | | | | X | |
| 13 | Pollution | | | | X | |
| 14 | Dsreliction and Dilspidation | | | | X | |
| 15 | Landscape and Recreation | | X | | | |
| 16 | The Building Stock: Housing | | | | | X |
| 17(s) | " " " : Industrial buildings; quantity | | X | | | |
| (b) | " " " : " " ; quality | | | | X | |
| 18 | " " " : Other buildinga | | | X | | |
| 19 | Public utilities | | | X | | |
| 20 | Education services | | X | | | |
| 21 | Health services | | | X | | |
| 22 | Health and environment | | | X | | |
| | D. Lsnd Availability Urban Structure and Locational Potential | | | | | |
| 23 | Land availability | | | | | X |
| 24 | Urban structure | | | B | HT | |
| 25(a) | Internal communications: existing | | | | X | |
| (b) | " " : including projects in the rosd programme | | BH | | T | |
| 26 | Relationship to service centres | | B | HT | | |
| 27 | Industrial relationships | B | H | T | | |
| 28 | Potential labour cstchment | | B | H | T | |
| 29 | Potential commuter function | | | | X | |

## POINTERS TO THE FUTURE

215. So far, this discussion of the economic, social and physical features of the study area has been concerned with individual assessments. The various items examined are, however, essentially interrelated and the remainder of this chapter deals with these relationships as seen in current trends and forecasts for the future.

216. It was shown in Chapter 2 that the total population of the study area has been falling in recent years, so continuing a trend dating from the beginning of this century. This decline results from a combination of a low rate of natural increase and a considerable net loss by migration. In the period 1962-6, net outward migration has increased to a rate of 0.50% per annum. Migration has been particularly heavy from the western end of the study area and the indications are of a general drift in an easterly direction. An investigation into the age and sex structure of the net migration movement shows that people of a wide range of ages are involved in the net outwards movement. It is likely, however, that this is a recent characteristic; the fact that the proportion of older people is significantly greater than for the region or country as a whole suggests that in previous years migration was selective, with a greater proportionate loss of young people. Selective migration may also have been responsible, in whole or in part, for the low proportion of the population to have carried on their full-time education beyond the age of 15. This is based on a comparison of the study area with England and Wales; the region is, if anything, rather less fortunate than the study area in this respect.

217. Total employment has been static, with modest increases in the service industries offset by declines in manufacturing employment (Chapter 3). The principal reductions in the manufacturing sector have been in woollen and worsted and cotton, but carpets and the food industry have increased employment significantly. Again, the western end of the study area has fared worst, with considerable declines in total employment. But it is not any lack of jobs which is responsible for the loss of population by outward migration; on the contrary, there is undoubtedly a severe shortage of labour in the area. This is shown by the results of an analysis of unemployment, employment vacancies, activity rates, female part-time employment, recruitment of workers outside the study area and the experience of employers themselves.

218. There must therefore be explanations for the loss by migration other than a shortage of jobs. The possibilities explored include a number of aspects of the quality of employment in the area (Chapter 3) and environmental factors (Chapter 4). These have been assessed in Table 47. It has already been suggested that those items given a low assessment - i.e. "medium-low" and "low" - will represent brakes on economic growth in the area. It is likely therefore that the explanation of the migration loss is to be found in a combination of some or all of the following factors:-

(1) Employment: qualitative aspects:-

Item 9: wages and earnings
" 10: job stability and prospects.

(2) Environment and the building stock:-

Item 12: climate
" 13: pollution
" 14: dereliction and dilapidation
" 16: the building stock: housing.

All these are assessed "medium-low" (4) in Table 47 except housing which is assessed "low" (5). There can be little doubt that the extremely bad quality of the housing stock of the study area is an important cause of the loss of population. The finding that broadly all ages are represented in the net outward migration movement lends support to the conclusions that factors relating to environment as well as to employment are causing population migration.

219. But although the overall result of the interplay of factors is decline rather than expansion, this does not mean that all factors point in the same direction. The average of all the assessments in Table 47 would appear to be between "3" (medium) and "4" (medium-low). Comparatively, then, all those items assessed "medium" or higher may be regarded as resources which are in danger of not being fully realised because they are outweighed by the depressing effect of the other factors.

220. Among the area's human resources are a projected increase (if net outward migration were to stop) in the number of males of working age (item 1(a) in Table 47); a range of types of labour as measured by socio-economic group, (4(b)); a good supply of young people who have remained at school after the age of 15 (5); and a well-developed community life (6). On the employment side, there is a continuing and ample supply of male jobs (7(a)) and good training facilities in local industries (11). The potential represented by landscape and recreation facilities is good (15); a supply of industrial and other buildings is available (17) although their quality may be relatively generally poor; whilst the existing population is generally well provided with public utilities (19), education services (20) and health services (21). There are a number of major commitments in the road programme which will bring about a considerable improvement to the road network in all but the western end of the study area (25(b)). Finally, the area is able to benefit from being close to other large towns in three main ways: first, accessibility to a wide range of services (26); secondly, the possibility of important industrial linkages and proximity to a large market (27); and thirdly (except in the west) the potential of large labour catchments (28).

221. This is a considerable list of items on the credit side, which would appear to represent resources capable of either supporting growth or at least maintaining the present population of the study area. Yet the indications are that because of the constraints upon growth, population increase is unlikely. In order to assess the relative strengths of the various constraints, estimates have been made of the total populations which could be supported given various assumptions. These are shown diagrammatically in Fig. 25 which provides a number of pointers to the population of the study area in 1981. Each pointer is allocated a letter (A - G) for reference purposes.

222. The population of the study area in 1966 was 196,000. Without making any allowance for migration, natural increase would bring the total to some 215,000 by 1981 (A). But if recent trends were to continue, the 1981 population would be only 190,000 (B). The other pointers demonstrate the effect of the shortage of land and the poor quality of the housing stock. The 1981 population capacities implied by these factors vary according to the assumptions made. Two sets of estimates are shown. The first is based on the assumption that the number of existing houses which should be cleared by 1981 is equivalent to all those with a rateable value of less than £30. These represent a majority of the existing housing stock. In 1966, only about 84,000 people lived in houses with a rateable value of £30 or over (D). If

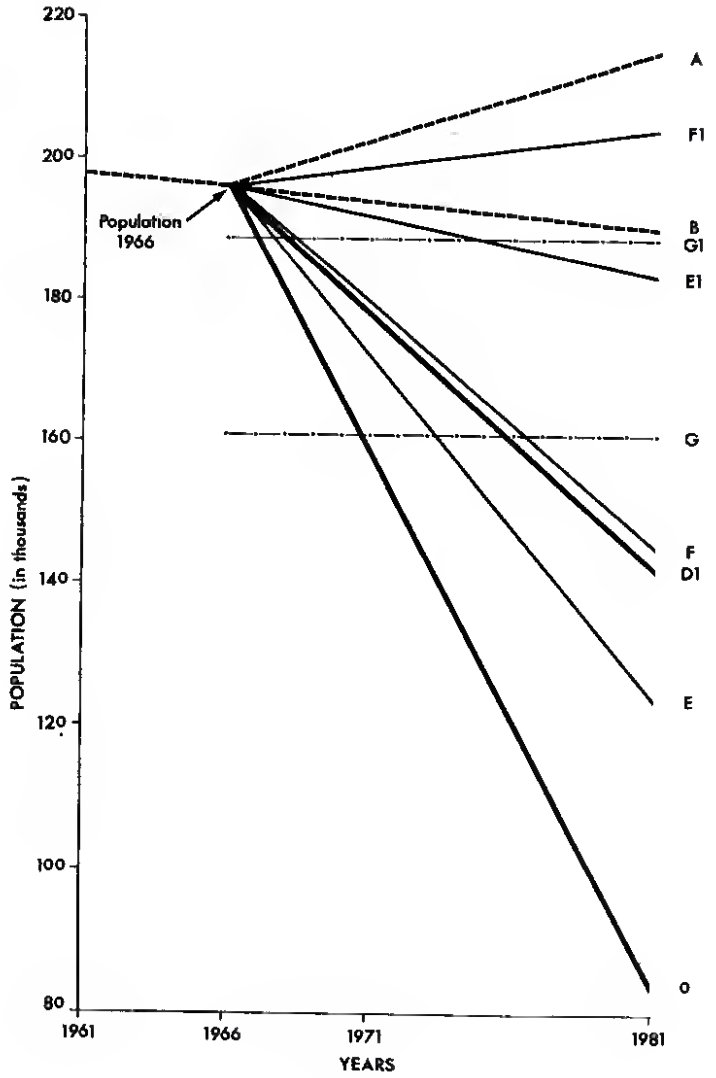


**Fig.25. POINTERS TO FUTURE POPULATION**

(A) Population trend assuming no net outward migration.

(F.1) Population capacity of existing acceptable housing stock as in D.1, plus housing completions 50% in excess of existing rate (approximately 1,500 per annum).

(B) Population trend assuming continuation of net outward migration at 1962-6 rate.

(G.1) Population capacity of all available land with all new land developed at 10 dwellings per acre, half houses under £30 rateable value cleared, and half of these replaced on redeveloped sites.

(E.1) Population capacity of existing acceptable housing stock as in D.1 plus housing completions at existing rate (approximately 1,000 per annum).

(G) Population capacity of all available land with all new land developed at 10 dwellings per acre, all houses under £30 rateable value cleared, and half of these replaced on redeveloped sites.

(F) Population capacity of existing acceptable housing stock as in (D) plus housing completions 50% in excess of existing rate (i.e. approximately 1,500 per annum).

(D.1) Population capacity of existing acceptable housing stock, half houses under £30 rateable value being unacceptable.

(E) Population capscity of existing acceptable housing stock as in (D) plus housing completions at existing rate (approximately 1,000 per annum).

(D) Population capscity of existing acceptable housing stock, all houses under £30 rateable value being unacceptable.

new houses are completed at the recent rate of about 1,000 a year, the population capacity of the acceptable housing stock in 1981 would be some 125,000 (E). Assuming a completion rate of 1,500 houses a year, this figure would be increased to 145,000 (F). The total population capacity of the area when all suitable land is developed is estimated at 160,000 (G). This is based on the following assumptions:-

(a) all houses with a rateable value under £30 are cleared;

(b) half the houses cleared are replaced on the site;

(c) new housing is built at an average gross density of 10 dwellings per acre;

(d) no part of the green belt is regarded as suitable for development.

223. A similar set of calculations has been carried out on the basis that only half the houses with a rateable value under £30 will be cleared by 1981. On this reduced standard of acceptability some 143,000 people are adequately housed at present (D.1), whilst the population capacity at 1981 would be 184,000 (E.1) at 1,100 housing completions a year and 204,000 (F.1) at 1,500 a year. This, however, is greater than the capacity of the available land - 189,000 (G.1).

224. Without prejudice to proposals for a strategy for development of the area, it seems clear that the range of population targets which must be considered includes the possibility of continuing decline. This could bring special difficulties and there is a risk that the interaction of factors will produce a cumulative effect which is difficult to halt. The following sequence is an example of the process which could occur in future and may be occurring now:-

(i) bad housing and environment, with poor employment opportunities (e.g. low earnings, below par working conditions);

(ii) net outward migration, particularly of the younger, better educated and more enterprising;

(iii) reduction in the quality of labour in the area particularly in skilled labour, management, technical and professional grades;

(iv) industrial expansion and new industries discouraged; private investment in housing, shops etc. discouraged; quality and range of services tend to fall behind in comparison with other areas;

(v) housing, environment and employment opportunities become worse, and the cycle repeats itself.

Other sequences may be postulated involving, for instance, the shortage of land suitable for development and the adverse psychological effects on potential investors of population decline and existing low levels of investment. The essential danger here is the self-reinforcing effect of these interactions.

225. We conclude from this assessment that the appropriate regional planning strategy for the study area would in all probability envisage a continuation of the population decline which has characterised the area from the beginning of this century. But simultaneously with a decrease in the quantity of people, jobs and houses, there will need to be an improvement in the quality of labour, jobs, housing and environment. Apart from the desirability of these improvements as planning objectives in their own right, it is likely that firm and specific action to bring about these improvements will be required to avert a cumulative deterioration in the future.

# APPENDICES

APPENDIX

A

# STATISTICAL SOURCES

This appendix provides some notes on the sources of statistical data used in the report and in Appendices B to H. A list of published sources is also included.

## DEFINITION OF AREAS

The study area consists of the local authority areas of Halifax C.B., Brighouse M.B., Elland U.D., Sowerby Bridge U.D., Hebden Royd U.D., Todmorden M.B., Hepton R.D. and Ripponden U.D. It is possible to use these areas to obtain statistics of population, housing, derelict land and smoke control.

For employment statistics, however, it is necessary to use Employment Exchange areas which differ slightly from the Local Authority areas. The areas are compared below:-

(a) Brighouse E.E.A. consists of Brighouse M.B. except Hipperholme ward and about one third of Lightcliffe and Southowram wards;

(b) Elland E.E.A. is equivalent to Elland U.D.;

(c) Halifax E.E.A. comprises Halifax C.B. plus those parts of Brighouse M.B. which are excluded from Brighouse E.E.A.; Halifax E.E.A. also includes Ambler Thorn ward and about a third of Queensbury North ward within Queensbury and Shelf U.D.;

(d) Hebden Bridge E.E.A. contains Hebden Royd U.D. and Hepton R.D. except an area of Wadsworth where the population is small;

(e) Sowerby Bridge E.E.A. includes Sowerby Bridge U.D. and Ripponden U.D. except half of Barkisland ward;

(f) Todmorden E.E.A. covers the same area as Todmorden M.B.

## POPULATION

Population data in Chapter 2 and Appendix B relate to the Home Population; this includes members of the armed forces. The sources of these data are the Registrar General's decennial Censuses, the 1966 10 per cent Sample Census and the Registrar General's annual estimates of population and natural change. It should be noted that the 1966 Sample Census is under-enumerated nationally by about 1.8%.

## INDUSTRY AND EMPLOYMENT

Appendix C gives details of the Industrial Survey which provided the data for a number of tables in Chapter 3 and elsewhere in the report. Local information used in Chapters 1 and 3 and Appendix D on local employment, unemployment, vacancies and special transport for employees is collected by the Ministry of Labour for individual Employment Exchange areas. Regional and national data about these matters and about earnings are published in the Ministry of Labour Gazette. The activity rates shown in Table 15 are estimates based on local data from the Census reports of 1951, 1961, 1966, regional data from the Population Tables of the Registrar General's Annual Statistical Review, and employment estimates of the Ministry of Labour.

## BUILDINGS AND ENVIRONMENT

In Chapter 4, the data on climate comes from the Meteorological Office. Statistics of housing were obtained from the Census reports and from the Ministry of Housing and Local Government. The use of different sources has resulted in discrepancies in the totals given for the housing stock of the study area. Statistics on dereliction and smoke control were also provided by the Ministry of Housing and Local Government. Data on new industrial buildings and extensions (Table 29) were provided by the Board of Trade. Local statistics on rateable values are published annually by the Ministry of Housing and Local Government in Rates and Rateable Values in England and Wales.

## EDUCATION

Reference is made in Chapter 2 to the proportion of children staying on after the statutory school leaving age (Table 9). These figures were provided by the Department of Education and Science. The comparable regional and national figures were derived from List 69 (see below for full reference). In Chapter 4, local statistics for the Ashlar and Calder divisions of the West Riding were obtained by special enquiries. Material for Table 32 was taken from List 71. Table 33 also derives from List 71 but this was not published after 1963. Some List 71 series were continued in List 69, and others in Education Statistics published by the Institute of Municipal Treasurers and Accountants and the Society of County Treasurers. The series on oversize classes was discontinued after 1963.

The Department of Education and Science obtained the material on school buildings referred to in Table 34. The regional and national data are only available for 1962 and were published in School Building Survey, 1962 (Department of Education and Science).

## HEALTH

Data on the provision of hospital beds were obtained from the Leeds Regional Hospital Board. The information on major hospital building schemes is based on Cmnd.3000 - The Hospital Building Programme - a Revision of the Hospital Plan for England and Wales, May 1963. The details in Cmnd.3000 have been updated to December 1967 by the Ministry of Health in consultation with the Leeds Regional Hospital Board. National and regional data on general practitioners and dentists (Table 36) are published in the Annual Reports of the Ministry of Health. Local data were obtained from the Medical Executive Council's lists.

# LIST OF PUBLISHED SOURCES OF STATISTICS AND OTHER REFERENCES


1. Review of Yorkshire and Humberside - Yorkshire and Humberside Economic Planning Council, H.M.S.O. 1966.

2. Census - reports of the decennial census of population 1901-61 and of the 1966 Sample Census.

3. Registrar-General's annual estimates of the population of England and Wales and of Local Authority Areas.

4. Factors affecting the Location of Industry e.g. Halifax - by D.I. Scargill in Geography volume XLVIII April 1963 page 166.ff.

5. What is the Leeds Region? - by Professor A.J. Brown in Leeds and its Region, British Association 1967.

6. Social Enterprise - by Mary Morris, National Council of Social Service, 1962.

7. The Woollen and Worsted Industry: an Economic Analysis - by G.F. Rainnie, Oxford University Press, 1965.

8. Ministry of Labour Gazette - H.M.S.O., monthly.

9. Smoke Control (England and Wales); Summary of Programmes submitted by Local Authorities for the establishment of Smoke Control Areas - Command 1890, 1962.

10. Official Handbooks of:-

    Halifax C.B.
    Brighouse M.B.
    Todmorden M.B.
    Elland U.D.
    Hebden Royd U.D.
    Sowerby Bridge U.D.
    Hepton R.D.

11. Buildings of England - West Riding - by N. Pevsner, Penguin Books, 1959.

12. British Waterways - Recreation and Amenity, Command 3401, 1967.

13. Housing Statistics - Ministry of Housing and Local Government, H.M.S.O. (quarterly).

14. Rates and Rateable Values in England and Wales - Ministry of Housing and Local Government, H.M.S.O. (annually).

15. Industrial Health - A Survey in Halifax by H.M. Factory Inspectorate, H.M.S.O., 1958.

16. Secondary Education in each Local Education Authority Area (List 69), Department of Education and Science, H.M.S.O.

17. Selected Statistics relating to Local Education Authorities in England and Wales (List 71) Department of Education and Science, H.M.S.O.

18. Registrar General's Annual Statistical Review; (1) Population Tables, (2) Medical Tables - H.M.S.O.

19. The Hospital Building Programme - a Revision of the Hospital Plan for England and Wales - Command 3000, H.M.S.O., 1966.

20. Report on an Enquiry into the Incidence of Incapacity for Work - Part II - Ministry of Pensions and National Insurance, H.M.S.O., 1965.

21. Annual Reports of the Ministry of Health, H.M.S.O.

22. Prevalence and Pathological Changes of Ischaemic Heart disease in a Hard Water and in a Soft Water area - by T. Crawford and M.D. Crawford in the Lancet Volume 1, 1967, 4th February, 1967, page 229.

23. Hardness of Local Water supplies and mortality from cardiovascular disease by J.N. Morris, M.D. Crawford and J.A. Heady in the Lancet 22nd April, 1961, page 860.

APPENDIX

BI

# HOME POPULATION CHANGES 1951 - 56

| Area | Home Population 1951 | Changes 1951-56 | | | | | | Home Population 1956 |
|---|---|---|---|---|---|---|---|---|
| | | Total | | By Births and Deaths | | Estimated Net Balance including Migration | | |
| | | No. | % | No. | % | No. | % | |
| England and Wales | 43,800,000 | 867,000 | 2.0 | 860,000 | 2.0 | 7,000 | 0.01 | 44,667,000 |
| Yorkshire and Humberside | 4,484,050 | 42,150 | 0.9 | 85,000 | 1.9 | -42,850 | -1.0 | 4,526,200 |
| West Yorkshire | 1,867,720 | - 600 | -0.03 | 17,259 | 0.9 | -17,859 | -1.0 | 1,867,120 |
| Study Area | 204,295 | - 2,875 | -1.4 | - 71 | -0.03 | - 2,804 | -1.4 | 201,420 |
| Halifax C.B. | 97,490 | - 1,050 | -1.1 | 24 | 0.02 | - 1,074 | -1.1 | 96,440 |
| Brighouse M.B. | 30,500 | - 10 | -0.03 | 86 | 0.3 | - 96 | -0.3 | 30,490 |
| Elland U.D. | 19,070 | - 180 | -0.9 | 16 | 0.08 | - 196 | -1.0 | 18,890 |
| Hebden Royd U.D. | 10,180 | - 310 | -3.0 | - 140 | -1.4 | - 170 | -1.7 | 9,870 |
| Ripponden U.D. | 5,309 | - 169 | -3.2 | 3 | 0.05 | - 172 | -3.2 | 5,140 |
| Sowerby Bridge U.D. | 18,750 | - 490 | -2.6 | 122 | 0.7 | - 612 | -3.3 | 18,260 |
| Todmorden M.B. | 18,920 | - 620 | -3.3 | - 181 | -1.0 | - 439 | -2.3 | 18,300 |
| Hepton R.D. | 4,076 | - 46 | -1.1 | - 1 | -0.02 | - 45 | -1.1 | 4,030 |

APPENDIX

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# HOME POPULATION CHANGES 1956 - 61

| Area | Home Population 1956 | Changes 1956-61 | | | | | | Home Population 1961 |
|---|---|---|---|---|---|---|---|---|
| | | Total | | By Births and Deaths | | Estimated Net Balance including Migration | | |
| | | No. | % | No. | % | No. | % | |
| England and Wales | 44,667,000 | 1,499,000 | +3.4 | 1,114,000 | 2.5 | 385,000 | 0.9 | 46,166,000 |
| Yorkshire and Humberside | 4,526,200 | 76,670 | 1.7 | 107,000 | 2.4 | - 30,330 | -0.7 | 4,602,870 |
| West Yorkshire | 1,867,120 | 21,560 | 1.2 | 28,948 | 1.6 | - 7,388 | -0.4 | 1,888,680 |
| Study Area | 201,420 | - 3,360 | -1.7 | 798 | 0.4 | - 4,158 | -2.1 | 198,060 |
| Halifax C.B. | 96,440 | - 460 | -0.5 | 927 | 1.0 | - 1,387 | -1.4 | 95,980 |
| Brighouse M.B. | 30,490 | 490 | 1.6 | 157 | 0.5 | 333 | 1.1 | 30,980 |
| Elland U.D. | 18,890 | - 530 | -2.8 | - 71 | -0.4 | - 459 | -2.4 | 18,360 |
| Hebden Royd U.D. | 9,870 | - 430 | -4.4 | -138 | -1.4 | - 292 | -3.0 | 9,440 |
| Ripponden U.D. | 5,140 | 780 | 15.2 | - 51 | -1.0 | 831 | 16.2 | 5,920 |
| Sowerby Bridge U.D. | 18,260 | - 1,980 | -10.8 | 155 | 0.8 | - 2,135 | -11.7 | 16,280 |
| Todmorden M.B. | 18,300 | - 880 | - 4.8 | -155 | -0.8 | - 725 | -4.0 | 17,420 |
| Hepton R.D. | 4,030 | - 350 | - 8.7 | - 26 | -0.6 | - 324 | -8.0 | 3,680 |

APPENDIX

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# HOME POPULATION CHANGES 1961 - 62

| Area | Home Population 1961 | Changes 1961-62 | | | | | | Home Population 1962 |
|---|---|---|---|---|---|---|---|---|
| | | Total | | By Births and Deaths | | Estimated Net Balance including Migration | | |
| | | No. | % | No. | % | No. | % | |
| England and Wales | 46,166,000 | 503,000 | 1.1 | 237,100 | 0.5 | 265,900 | 0.6 | 46,669,000 |
| Yorkshire and Humberside | 4,602,870 | 39,800 | 0.9 | 25,600 | 0.6 | 14,200 | 0.3 | 4,642,670 |
| West Yorkshire | 1,888,680 | 13,700 | 0.7 | 7,721 | 0.4 | 5,979 | 0.3 | 1,902,380 |
| Study Area | 198,060 | 450 | 0.2 | 284 | 0.1 | 166 | 0.1 | 198,510 |
| Halifax C.B. | 95,980 | 270 | 0.3 | 166 | 0.2 | 104 | 0.1 | 96,250 |
| Brighouse M.B. | 30,980 | 280 | 0.9 | 90 | 0.3 | 190 | 0.6 | 31,260 |
| Elland U.D. | 18,360 | - 40 | -0.2 | - 14 | -0.07 | - 26 | -0.1 | 18,320 |
| Hebden Royd U.D. | 9,440 | - 60 | -0.6 | - 8 | -0.1 | - 52 | -0.6 | 9,380 |
| Ripponden U.D.* | 5,920 | - 980 | -16.6 | 1 | 0.01 | - 981 | -16.6 | 4,940 |
| Sowerby Bridge U.D.* | 16,280 | 1,070 | 6.6 | 89 | 0.5 | 981 | 6.0 | 17,350 |
| Todmorden M.B. | 17,420 | - 120 | -0.7 | - 35 | -0.2 | - 85 | -0.5 | 17,300 |
| Hepton R.D. | 3,680 | 30 | 0.8 | - 5 | -0.1 | 35 | 1.0 | 3,710 |

* It has not been possible to explain the apparently anomalous changes in these areas. In preparing Fig. 7 the changes have been regarded as cancelling out each other.

APPENDIX

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# HOME POPULATION CHANGES 1962 - 66

| Area | Home Population 1962 | Changes 1962-66 | | | | | | Home Population 1966 |
|---|---|---|---|---|---|---|---|---|
| | | Total | | By Births and Deaths | | Estimated Net Balance including Migration | | |
| | | No. | % | No. | % | No. | % | |
| England and Wales | 46,669,000 | 1,406,300 | 3.0 | 1,219,700 | 2.6 | 186,600 | 0.4 | 48,075,300 |
| Yorkshire and Humberside | 4,642,670 | 89,440 | 1.9 | 113,268 | 2.4 | -23,828 | -0.5 | 4,732,110 |
| West Yorkshire | 1,902,380 | 13,750 | 0.7 | 37,066 | 1.9 | -23,316 | -1.2 | 1,916,130 |
| Study Area | 198,510 | - 2,140 | -1.1 | 1,921 | 1.0 | - 4,061 | -2.0 | 196,370 |
| Halifax C.B. | 96,250 | - 1,300 | -1.4 | 1,207 | 1.3 | - 2,507 | -2.6 | 94,950 |
| Brighouse M.B. | 31,260 | 1,080 | 3.5 | 552 | 1.8 | 528 | 1.7 | 32,340 |
| Elland U.D. | 18,320 | 200 | 2.1 | 182 | 1.0 | 18 | 0.1 | 18,520 |
| Hebden Royd U.D. | 9,380 | - 390 | -4.2 | - 147 | -1.6 | - 243 | -2.6 | 8,990 |
| Ripponden U.D. | 4,940 | 0 | 0 | 4 | 0.08 | - 4 | -0.08 | 4,940 |
| Sowerby Bridge U.D. | 17,350 | - 660 | -3.8 | 185 | 1.1 | - 845 | -4.9 | 16,690 |
| Todmorden M.B. | 17,300 | - 960 | -5.5 | - 54 | -0.3 | - 906 | -5.2 | 16,340 |
| Hepton R.D. | 3,710 | - 110 | -3.0 | - 8 | -0.2 | - 102 | -2.7 | 3,600 |

APPENDIX

B2

# MIGRATION, 1960 - 61

The following data, based on a 10 per cent sample, is abstracted from the 1961 Census Migration Tables (Table 7). It is limited to Halifax C.B. as very few movements to and from the smaller areas are recorded in any detail. The figures are presented in the same way as in the Census; they refer to the number actually recorded in the 10 per cent sample and should be multiplied by ten to obtain an estimate of the total number of people involved.

| Area | Into Halifax C.B. | | | Out of Halifax C.B. | | | Balance | | |
|---|---|---|---|---|---|---|---|---|---|
| | Males | Females | Total | Males | Females | Total | Males | Females | Total |
| Halifax C.B. Total | 1,64 | 1,72 | 3,36 | 1,45 | 1,83 | 3,28 | + 19 | - 11 | + 8 |
| Hebden Royd U.D. | 7 | 11 | 18 | - | - | - | + 7 | + 11 | + 18 |
| Sowerby Bridge U.D. | 44 | 40 | 84 | 29 | 30 | 59 | + 15 | + 10 | + 25 |
| West of Halifax | 51 | 51 | 102 | 29 | 30 | 59 | + 22 | + 21 | + 43 |
| Bradford C.B. | 8 | 15 | 23 | 7 | 10 | 17 | + 1 | + 5 | + 6 |
| Huddersfield C.B. | 6 | 4 | 10 | 11 | 15 | 26 | - 5 | - 11 | - 16 |
| Brighouse M.B. | 9 | 8 | 17 | 10 | 15 | 25 | - 1 | - 7 | - 8 |
| Elland U.D. | 8 | 9 | 17 | 12 | 13 | 25 | - 4 | - 4 | - 8 |
| Queensbury and Shelf U.D. | - | - | - | 9 | 10 | 19 | - 9 | - 10 | - 19 |
| East of Halifax | 31 | 36 | 67 | 49 | 63 | 112 | - 18 | - 27 | - 45 |
| West Riding (remainder) | 21 | 28 | 49 | 29 | 42 | 71 | - 8 | - 14 | - 22 |
| Lancs. (A.Cs. and C.Bs) | 10 | 10 | 20 | 8 | 8 | 16 | + 2 | + 2 | + 4 |
| London | - | - | - | 4 | 6 | 10 | - 4 | - 6 | - 10 |
| Elsewhere in England and Wales | 30 | 27 | 57 | 26 | 34 | 60 | + 4 | - 7 | - 3 |
| Elsewhere in British Isles | 12 | 9 | 21 | - | - | - | + 12 | + 9 | + 21 |
| Elsewhere - abroad | 9 | 11 | 20 | - | - | - | + 9 | + 11 | + 20 |
| Total-other areas | 82 | 85 | 1,67 | 67 | 90 | 1,57 | + 15 | - 5 | + 10 |

APPENDIX

B3

# AGE/SEX STRUCTURE, 1951, 1961 AND 1966

| Area | | Census Population | Age-Sex Groups (percentages) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0-14 | | 15-39 | | 40-64 | 40-59 | 65 and over | 60 and over |
| | | | M | F | M | F | M | F | M | F |
| England & Wales | 1951 | 43,757,888 | 11.3 | 10.8 | 17.2 | 17.8 | 14.9 | 14.1 | 4.5 | 9.3 |
| | 1961 | 46,104,548 | 11.8 | 11.2 | 16.5 | 16.3 | 15.5 | 13.8 | 4.6 | 10.4 |
| | 1966 | 47,135,510 | 11.8 | 11.2 | 16.5 | 16.2 | 15.4 | 13.4 | 4.7 | 10.8 |
| Yorkshire & Humberside | 1951 | 4,501,326 | 11.6 | 11.1 | 17.0 | 17.7 | 15.2 | 14.1 | 4.4 | 8.9 |
| | 1961 | 4,600,224 | 12.1 | 11.5 | 16.3 | 16.1 | 15.7 | 13.7 | 4.4 | 10.1 |
| | 1966 | 4,669,200 | 12.1 | 11.5 | 16.4 | 16.0 | 15.6 | 13.2 | 4.6 | 10.5 |
| Study Area | 1951 | 205,655 | 10.4 | 10.1 | 15.3 | 16.8 | 15.7 | 15.7 | 5.0 | 11.1 |
| | 1961 | 197,955 | 11.3 | 10.9 | 14.7 | 15.1 | 16.1 | 14.6 | 4.9 | 12.4 |
| | 1966 | 195,770 | 11.5 | 10.7 | 15.5 | 15.1 | 15.8 | 14.0 | 4.8 | 12.6 |
| Halifax C.B. | 1951 | 98,404 | 10.4 | 10.2 | 15.5 | 17.0 | 15.6 | 15.6 | 4.6 | 10.9 |
| | 1961 | 96,120 | 11.4 | 11.2 | 14.9 | 15.3 | 15.9 | 14.5 | 4.7 | 11.9 |
| | 1966 | 94,090 | 11.8 | 11.0 | 15.7 | 15.1 | 15.6 | 13.8 | 4.5 | 12.4 |
| Brighouse M.B. | 1951 | 30,587 | 10.5 | 10.3 | 15.3 | 16.6 | 15.9 | 15.4 | 5.0 | 11.0 |
| | 1961 | 30,804 | 11.4 | 10.7 | 14.7 | 15.3 | 10.3 | 14.7 | 5.0 | 12.0 |
| | 1966 | 32,240 | 11.6 | 10.7 | 15.6 | 15.7 | 15.6 | 13.5 | 5.3 | 12.0 |
| Elland U.D. | 1951 | 19,275 | 10.0 | 9.8 | 14.5 | 16.7 | 16.1 | 16.3 | 5.3 | 11.3 |
| | 1961 | 18,357 | 11.4 | 10.3 | 14.1 | 14.9 | 16.6 | 15.0 | 4.8 | 12.9 |
| | 1966 | 18,850 | 11.9 | 10.0 | 15.2 | 15.2 | 15.8 | 15.7 | 4.5 | 11.7 |
| Hebden Royd U.D. | 1951 | 10,232 | 9.5 | 9.1 | 14.4 | 15.8 | 16.0 | 16.6 | 6.0 | 12.7 |
| | 1961 | 9,411 | 10.3 | 10.5 | 13.6 | 14.1 | 16.0 | 14.4 | 5.7 | 15.2 |
| | 1966 | 9,280 | 10.1 | 11.7 | 14.4 | 14.5 | 15.7 | 13.9 | 4.4 | 15.1 |
| Ripponden U.D. | 1951 | 5,220 | 11.1 | 10.4 | 15.4 | 16.1 | 16.1 | 15.4 | 5.2 | 10.3 |
| | 1961 | 4,803 | 11.8 | 10.7 | 14.3 | 14.5 | 16.9 | 15.4 | 5.2 | 11.1 |
| | 1966 | 4,440 | 12.2 | 6.3 | 16.2 | 12.2 | 17.8 | 17.6 | 5.6 | 12.2 |
| Sowerby Bridge U.D. | 1951 | 18,775 | 10.5 | 10.1 | 15.3 | 17.5 | 14.7 | 15.6 | 5.0 | 11.3 |
| | 1961 | 17,350 | 11.6 | 11.1 | 14.9 | 15.4 | 15.4 | 14.0 | 4.9 | 12.7 |
| | 1966 | 16,940 | 11.8 | 10.9 | 15.1 | 16.3 | 15.6 | 13.1 | 5.0 | 12.3 |
| Todmorden M.B. | 1951 | 19,074 | 10.3 | 9.4 | 15.0 | 16.2 | 15.9 | 16.3 | 5.6 | 11.4 |
| | 1961 | 17,428 | 10.8 | 10.5 | 14.6 | 14.3 | 16.2 | 14.8 | 5.6 | 13.2 |
| | 1966 | 16,260 | 9.2 | 9.1 | 15.1 | 14.0 | 16.9 | 14.9 | 5.6 | 15.1 |
| Hepton R.D. | 1951 | 4,088 | 10.9 | 10.0 | 15.0 | 16.1 | 15.6 | 15.6 | 6.1 | 10.8 |
| | 1961 | 3,682 | 10.6 | 10.3 | 14.5 | 14.9 | 16.9 | 15.3 | 6.1 | 11.9 |
| | 1966 | 3,670 | 13.6 | 12.3 | 15.0 | 15.5 | 14.2 | 12.3 | 4.4 | 12.8 |

APPENDIX

B4

# SOCIO-ECONOMIC GROUPS OF ECONOMICALLY ACTIVE MALES, 1961

per '000

| Socio-Economic Group | Study Area | Halifax C.B. | England & Wales |
|---|---|---|---|
| 1. Employers - large establishments | 42 | 44 | 36 |
| 2. Employers - small establishments | 61 | 52 | 59 |
| 3. Professional - self-employed | 8 | 10 | 8 |
| 4. Professional - employees | 22 | 22 | 30 |
| 1-4 Managerial/Professional | 133 | 128 | 133 |
| 5. Intermediate non-manual | 29 | 30 | 39 |
| 6. Junior " " | 101 | 114 | 126 |
| 7. Personal Service Workers | 4 | 5 | 9 |
| 5-7 Non-Manual | 134 | 149 | 174 |
| 8. Foremen and Supervisors (manual) | 48 | 45 | 33 |
| 9. Skilled manual | 353 | 352 | 316 |
| 10. Semi-skilled manual | 176 | 182 | 147 |
| 11. Unskilled | 87 | 92 | 83 |
| 12. Own account workers (excluding 3) | 30 | 28 | 34 |
| 8-12 Manual Etc. | 694 | 699 | 613 |
| 13. Farmers employing men | 6 | 2 | 10 |
| 14. " own account | 10 | 5 | 10 |
| 15. Agricultural workers | 9 | 4 | 23 |
| 16. Members of armed forces | 3 | 5 | 20 |
| 17. Undefined | 11 | 8 | 17 |
| 13-17 Others (including agricultural) | 39 | 24 | 80 |
| Total | 1,000 | 1,000 | 1,000 |

APPENDIX

C

# THE INDUSTRIAL SURVEY

A brief account of the industrial survey is given in para. 40 of the study. This appendix gives further details of the sample survey and a short note on the special survey of firms known to have been involved in moves into or out of the study area.

## THE SAMPLE SURVEY

(a) The Sample. A list of 118 establishments in the study area was compiled taking into account the need to obtain a sample which was representative in the following respects:-

(i) in the range of industries covered;
(ii) in geographical distribution within the study area.

All the largest establishments were included, with a proportion of the smaller.

(b) Response. Of the 118 establishments, data concerning ten of the largest were obtained by interview. This allowed valuable supplementary information to be collected. The remaining 108 were sent the questionnaire by post in June 1967 and 88 replies were received. The total response represented a rate of 83 per cent. The industrial coverage of the 97 replies from manufacturing firms is set out in Table C1. In total the survey covered some 17 per cent of all manufacturing establishments with eleven or more employees and 46 per cent of manufacturing employment.

(c) The Questionnaire. A total of fourteen questions were asked. Analysis of the answers to most questions may be found in the text of the report. Those that have not been fully analysed in the report are discussed in the remaining sections of this appendix. The questions related to:-

1-3 Statistics of the establishment - whether headquarters, branch etc.; see para. 47 and section (d) below;

4 Availability of services; see para. 124.

5 Adequacy of buildings; see paras. 117-118.

6 Adequacy of site; see para. 142.

7 Local availability of technological services; see para. 51.

8 Availability of labour of different grades; see paras. 60-63.

9 Change in conditions in the local labour market over the last ten years; see para. 64.

10 Part-time employment for women; see para. 56.

11 Employment by broad occupational groups; see section (e) below. Estimated future demand in 1971; this information is used in the estimate of future demand for labour in para. 77 and Appendix E.

12 Effect of the M.62 on the firm; see para. 176.

13 Advantages of location in the area; see paras. 49-50 and section (f) below.

14 Space for further comments; see section (g) below.

TABLE C1: MANUFACTURING FIRMS RESPONDING TO THE SAMPLE SURVEY BY MAIN INDUSTRY ORDERS

| S.I.C. Order No. | Industry | Firms responding to the survey | | All firms, 1966 | |
|---|---|---|---|---|---|
| | | No. | Total employment, 1967 ('000) | No. of establishments with 11 or more employees | Total employment (all establishments) ('000) |
| III | Food etc. | 8 | 4.2 | 29 | 5.9 |
| VI | Engineering and Electrical Goods | 21 | 5.1 | 98 | 11.4 |
| IX | Other metal goods | 3 | 0.8 | 63 | 4.0 |
| X | Textiles | 35 | 13.4 | 196 | 27.5 |
| XII | Clothing and Footwear | 7 | 1.4 | 48 | 4.1 |
| V | Metal Manufacture | 4 | 3.1 | 128 | 8.1 |
| XIII | Bricks etc. | 5 | | | |
| XIV | Timber and Furniture | 5 | | | |
| etc. | Remainder | 9 | | | |
| III-XVI | Manufacturing Industries | 97 | 28.0 | 562 | 60.9 |

(d) Headquarters and Branches: the data referred to in para.47 are set out in tables C2 and C3.

TABLE C2: ESTABLISHMENTS BY TYPE AND INDUSTRY

| Order No. | Industry | No. of establishments which are:- | | | Total firms responding |
|---|---|---|---|---|---|
| | | Branches | Headquarters with branches elsewhere | Only establishments of firms without branches | |
| X | Textiles | 7 | 6 | 20 | 33 |
| VI | Engineering & Electrical | 2 | 4 | 15 | 21 |
| III | Food, Drink & Tobacco | 4 | - | 4 | 8 |
| XII | Clothing & Footwear | 1 | 2 | 4 | 7 |
| IX | Metal Goods (N.E.S.) | - | - | 3 | 3 |
| | All other manufacturing industries | 6 | 1 | 16 | 23 |
| III-XVI | Total | 20 | 13 | 62 | 95 |

TABLE C3: ESTABLISHMENTS BY TYPE AND NUMBER EMPLOYED

| Number employed | No. of establishments which are:- | | | Total firms responding |
|---|---|---|---|---|
| | Branches | Headquarters with branches elsewhere | Only establishments of firms without branches | |
| 0-49 | 2 | - | 20 | 22 |
| 50-99 | 2 | 3 | 13 | 18 |
| 100-249 | 4 | 2 | 13 | 19 |
| 250-499 | 6 | 5 | 14 | 25 |
| 500-999 | 5 | 1 | 1 | 7 |
| 1,000 and more | 1 | 2 | 1 | 4 |
| Totals | 20 | 13 | 62 | 95 |

SUMMARY (PERCENTAGES)

| | | | | |
|---|---|---|---|---|
| 0-249 | 14 | 8 | 78 | 100 |
| 250 and more | 34 | 22 | 44 | 100 |
| Totals | 21 | 14 | 65 | 100 |

(e) Employment by Broad Occupational Groups. Table C4 summarises information about employment by broad occupational groups in the 94 establishments replying to this question. The groups are as follows:-

(i) management, supervisory, technical and scientific workers
(ii) clerical and office staff
(iii) skilled (apprenticeship served or equivalent training)
(iv) semi-skilled (experienced or at least six month's training)
(v) other workers.

(f) Advantages of Location in the area. Question 13 asked industrialists whether the area had particular advantages for their firms. Of the 96 responding, 61 replied "yes" and 35 "no". The advantages mentioned fell almost entirely into two groups:-

(i) Proximity to suppliers of raw materials and to customers, local linkages with other establishments; 38 firms mentioned one or more of thsse factors.

(ii) Ths presence of a skilled labour force; 22 firms mentioned this, frequently emphasising the benefits both of traditional skills in ths labour force and of their firms being sstablishsd in the area for many years.

No other specific advantags was mentioned by more than two firms. It should be noted that this was an "open-ended" question, and no possible advantages were suggested.

(g) Other Comments. 32 firms made use of the opportunity provided by ths last question to make additional comments. The replies naturally ranged over a number of topics, and the question was valuable in that it acted as a check that no important point bearing on the problems and potential of local industry was overlooked. Many, but not all of the comments concerned disadvantages of location in the area. Those mentioned by at least four firms were:-

(i) Labour difficulties. Although covered elsewhere in the questionnaire, twelve firms took the opportunity to reiterate and elaborate this point.

(ii) Poor environment, particularly in its effect on the recruitment of executives (five firms).

(iii) The unfavourable location of the study area as compars d with the Development Areas, where Government inducements are availabls (five firms).

(iv) Difficulties in obtaining land suitable for devslopment (four firms).

TABLE C4: EMPLOYMENT IN MANUFACTURING INDUSTRIES BY BROAD OCCUPATIONAL GROUPS (94 ESTABLISHMENTS) 1967

| Order No. | Industry | | No. of establishments responding | Males | | | | | | Females | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Management etc. | Clerical | Skilled | Semi-Skilled | Other Workers | Total | Management etc. | Clerical | Skilled | Semi-Skilled | Other Workers | Total |
| III | Food etc. | | 8 | 120 | 30 | 160 | 220 | 710 | 1,240 | 100 | 160 | - | 150 | 2,550 | 2,960 |
| | | (%) | | (10) | (2) | (13) | (18) | (58) | (100) | (3) | (6) | | (5) | (86) | (100) |
| VI | Engineering and Electrical Goods | | 20 | 590 | 330 | 1,560 | 930 | 710 | 4,120 | - | 390 | - | 70 | 70 | 530 |
| | | (%) | | (14) | (8) | (38) | (23) | (17) | (100) | | (73) | | (13) | (13) | (100) |
| IX | Other Metal Goods | | 3 | 80 | 10 | 70 | 210 | 130 | 500 | - | 40 | - | 230 | 70 | 340 |
| | | (%) | | (17) | (2) | (14) | (41) | (26) | (100) | | (12) | | (67) | (20) | (100) |
| X | Textiles | | 34 | 990 | 400 | 840 | 3,050 | 2,580 | 7,860 | 140 | 650 | 220 | 2,190 | 2,320 | 5,520 |
| | | (%) | | (13) | (5) | (11) | (39) | (33) | (100) | (3) | (12) | (4) | (40) | (42) | (100) |
| XII | Clothing and Footwear | | 7 | 50 | 20 | 80 | 110 | 110 | 370 | 10 | 70 | 440 | 310 | 220 | 1,060 |
| | | (%) | | (14) | (5) | (21) | (30) | (30) | (100) | (1) | (7) | (42) | (30) | (21) | (100) |
| etc. | All other manufacturing | | 22 | 260 | 90 | 620 | 990 | 720 | 2,680 | 10 | 150 | 60 | 90 | 80 | 380 |
| | | (%) | | (10) | (3) | (23) | (37) | (27) | (100) | (2) | (39) | (17) | (22) | (20) | (100) |
| | Total | | 94 | 2,090 | 870 | 3,330 | 5,510 | 4,960 | 16,760 | 270 | 1,460 | 720 | 3,040 | 5,300 | 10,780 |
| | | (%) | | (12) | (5) | (20) | (33) | (30) | (100) | (3) | (14) | (7) | (28) | (49) | (100) |

Notes:- (1) Small errors in the totals are due to rounding

(2) For definitions of the broad occupational groups, see text.

## THE INDUSTRIAL MOVEMENT SURVEY

In order to avoid disclosing confidential information the detailed results of the survey cannot be given. Moreover, the small number of firms involved render a detailed analysis unreliable. There are other difficulties, such as the case of a firm transferring production from one area to another without actually opening or closing an establishment; the effect is similar, but information about such cases is less likely to become available. Nevertheless, it was considered useful to collect what dates were available as an indication of current trends in industrial location as they affect the study area.

Details were obtained from twelve firms of moves in the period 1953-67. Five of these moves were into the study area and seven outwards. The moves were fairly evenly distributed over the 15 year period and were broadly representative of the industrial structure of the area. The main industries involved were textiles (five firms) and engineering (three firms).

The term "movement" was defined to include the setting up of branch establishments as well as movements involving closure of the establishment at the original location. Two cases of transfers of production between establishments were also included.

The results of a limited enquiry about the reasons for moving are summarised in Table C5.

TABLE C5: INDUSTRIAL MOVEMENT SURVEY: REASONS FOR MOVING

| Reasons | Movements into the study area | Movements away from the study area |
|---|---|---|
| Better labour supply in new area | 1 | 5 |
| Inadequate land for expansion at old site | 1 | 5 |
| New site a better location for supplying market | 1 | 1 |
| Better amenities at new location | - | 2 |
| Reasons connected with re-organisation of the firm | 3 | 3 |
| Others | 2 | 1 |
| Total reasons given | 8 | 17 |
| Total number of firms | 5 | 7 |

APPENDIX

D

# EMPLOYMENT STATISTICS

NOTES

Statistice of employment, unemployment and unfilled vacancies in the study area are aggregates of figures for the six Employment Exchange areas - Halifax, Brighouse, Elland, Hebden Bridge, Sowerby Bridge and Todmorden.

Employment statistics are subject to sampling errors which can be substantial and therefore all figures are shown to the nearest hundred and percentages to the nearest whole number. Industries employing less than 2,500 in the study area are not shown separately.

Study area figures are distorted because of difficulties involved in the collection of statistics of persons who work in one area while their National Insurance contributions are paid in another. The most important group, which includes established Civil Servants, are "unlocated workers" who appear in regional and national but not in local area estimates. This means that figures for the study area are not strictly comparable with those for the Yorkshire and Humberside Region or Great Britain. As a high proportion of these workers are in service industries, the proportion of workers in the study area, in this group particularly, is underestimated. In addition estimates for each local area include a certain number of employees whose National Insurance cards are exchanged there although they work elsewhere and exclude others whose cards are exchanged elsewhere although they work in the area.

In 1959 the Standard Industrial Classification was revised and employment figures for individual industries up to and including 1958 are not comparable with those for 1959 onwards. Only figures for total employees in individual Employment Exchange areas are therefore given for the period before 1959. Because cyclical fluctuations affect the numbers employed, figures are given for years at similar stages in the economic cycle. There are also a number of other discontinuities in the time series of figures for Employment Exchange areas which may distort changes between 1959 and 1966. In particular the method for estimating the number of employees in such areas was changed in 1962.

Percentage unemployment figures for the Yorkshire and Humberside Region for 1965, 1966 and 1967 in Table 13 are based on official statistics of total employees, but estimates have been used for earlier years and unemployment percentages based on them may be slightly overestimated.

UNLOCATED WORKERS

Annual employment estimates for local areas are based on the number of National Insurance cards exchanged between June 1st and August 31st and on information supplied by employers during this psriod. Although most cards exchanged by employers in a particular area are for persons employed locally, some are for workers in other parts of the country. When an employer reveals that he has exchanged cards for 20 or more workers in other districts he is asked to state how many are involved and (for all industries except Distributive Trades) to list the area of employment and number involved for any group of ten or more. Workers 'located' in this way appear in the employment estimates for the local area in which they are employed. Workers who remain 'unlocated' do not appear in any local area estimates but they do appear in estimatss for the region and in national estimates.

APPENDIX

D1

# CHANGES IN TOTAL EMPLOYEES, 1953, 1959 AND 1966

Thousands

| Area | TOTAL EMPLOYEES | | | | | MALES | | | | | FEMALES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1953 | 1959 | 1966 | Change 1953-59 | Change 1959-66 | 1953 | 1959 | 1966 | Change 1953-59 | Change 1959-66 | 1953 | 1959 | 1966 | Change 1953-59 | Change 1959-66 |
| Halifax E.E.A. | 50,4 | 48,8 | 50,4 | - 1,6 | + 1,6 | 29,9 | 28,9 | 29,2 | - 1,0 | + 3 | 20,5 | 20,0 | 21,2 | - 5 | + 1,2 |
| Brighouse E.E.A. | 11,7 | 12,9 | 12,6 | + 1,2 | - 3 | 7,4 | 8,3 | 8,4 | + 9 | + 1 | 4,3 | 4,6 | 4,2 | + 3 | - 4 |
| Elland E.E.A. | 8,7 | 8,3 | 8,9 | - 4 | + 6 | 5,2 | 5,2 | 5,4 | - | + 2 | 3,5 | 3,2 | 3,5 | - 3 | + 3 |
| Hebden Bridge E.E.A. | 6,6 | 7,0 | 6,0 | + 4 | - 1,0 | 3,7 | 4,2 | 3,7 | + 5 | - 5 | 2,8 | 2,8 | 2,4 | - | - 4 |
| Sowerby Bridge E.E.A. | 9,5 | 8,8 | 8,4 | - 7 | - 4 | 5,8 | 5,2 | 5,3 | - 6 | + 1 | 3,8 | 3,6 | 3,1 | - 2 | - 5 |
| Todmorden E.E.A. | 8,4 | 7,2 | 6,7 | - 1,2 | 5 | 4,7 | 4,0 | 3,8 | - 7 | - 2 | 3,8 | 3,2 | 2,9 | - 6 | - 3 |
| Total: Study Area | 95,4 | 93,0 | 93,0 | - 2,4 | - | 56,7 | 55,7 | 55,7 | - 1,0 | - | 38,7 | 37,3 | 37,3 | - 1,4 | - |
| Total: Yorks. & Humberside | 1,941,2 | 2,004,1 | 2,111,3 | + 62,9 | + 107,2 | 1,295,9 | 1,324,3 | 1,357,2 | + 28,4 | + 32,9 | 645,3 | 679,8 | 754,1 | + 34,5 | + 74,3 |
| Total: Great Britain | 20,880,0 | 21,870,0 | 23,543,6 | + 990,0 | 1,673,6 | 13,720,0 | 14,230,0 | 14,894,8 | + 510,0 | + 664,8 | 7,160,0 | 7,640,0 | 8,648,8 | + 480,0 | +1,008,8 |

Notes 1. As figures are rounded to the nearest hundred they do not necessarily produce the exact totals or changes shown.

2. There are a number of discontinuities in the time series of figures which may distort changes in the study area over the period.

APPENDIX

D2

# CHANGES IN ESTIMATED NUMBERS OF EMPLOYEES BY INDUSTRY 1959, 1963 AND 1966

| Order or MLH | Industry | 1959 | 1963 | 1966 | 1959-63 (4 yrs.) | 1963-66 (3 yrs.) | 1959-66 (7 yrs.) |
|---|---|---|---|---|---|---|---|
| I & II | Primary Industries (Sub-total) | 1,400 | 1,300 | 1,300 | - 100 | - | - 100 |
| III incl. 217 | Food, Drink & Tobacco<br>Cocoa, Chocolate and Sugar Confectionery | 5,100<br>( 2,400) | 5,400<br>( 2,700) | 5,900<br>( 3,500) | + 300<br>(+ 300) | + 500<br>(+ 800) | + 800<br>(+ 1,100) |
| VI incl. | Engineering and Electrical Goods | 11,200 | 11,700 | 11,400 | + 500 | - 300 | + 200 |
| 332 | Metal working machine tools | ( 4,200) | ( 4,600) | ( 4,300) | (+ 400) | (- 300) | + 100 |
| IX | Metal Goods not elsewhere specified | 3,700 | 3,600 | 4,000 | - 100 | + 400 | + 300 |
| X incl. 412 and 413 | Textiles<br>Spinning & doubling) of cotton, flax and) man-made fibres )<br>Weaving of cotton, ) linen and man-made ) fibres ) | 30,800<br>( 6,500) | 28,900<br>( 4,200) | 27,500<br>( 4,200) | -1,900<br>-2,300 | - 1,400<br>- | - 3,300<br>(- 2,300) |
| 414 | Woollen & Worsted | (16,000) | (15,900) | (13,500) | (- 100) | (- 2,400) | (- 2,500) |
| 419 | Carpets | ( 4,300) | ( 4,900) | ( 5,600) | (+ 600) | (+ 700) | (+ 1,300) |
| XII | Clothing & Footwear | 4,200 | 4,000 | 4,100 | - 200 | + 100 | - 100 |
| IV, V, VII, VIII, XI, XIII, XIV, XV, XVI | All other Manufacturing Industries | 7,500 | 7,900 | 8,100 | + 400 | + 200 | + 600 |
| III-XVI | Manufacturing Industries (Sub-total) | 62,500 | 61,500 | 60,900 | -1,000 | - 600 | - 1,600 |
| XVII | Construction (Sub-total) | 3,600 | 4,000 | 3,900 | + 400 | - 100 | + 300 |
| XIX | Transport and Communications | 3,100 | 2,900 | 2,500 | - 200 | - 400 | - 600 |
| XX | Distributive Trades | 6,900 | 6,900 | 6,300 | - | - 600 | - 600 |
| XXII | Professional and Scientific Services | 6,000 | 6,600 | 7,500 | + 600 | + 900 | + 1,500 |
| XXIII | Miscellaneous Services | 4,600 | 4,900 | 5,000 | + 300 | + 100 | + 400 |
| XXIV | Public Administration and Defence | 2,600 | 2,600 | 2,800 | - | + 200 | + 200 |
| XVIII, XXI | All other Service Industries | 2,300 | 2,500 | 2,800 | + 200 | + 300 | + 500 |
| XVIII-XXIV | Service Industries (Sub-total) | 25,500 | 26,400 | 26,900 | + 900 | + 500 | + 1,400 |
| GRAND TOTAL | | 93,000 | 93,300 | 93,000 | + 300 | - 300 | - |

Notes 1. Industries with less than 2,500 employees are not shown separately.

2. As figures are rounded to the nearest hundred they do not necessarily produce the exact totals or changes shown.

3. There are a number of discontinuities in the time series of figures which may distort changes in the study area over the period.

APPENDIX

D3

# MONTHLY AVERAGES OF UNEMPLOYED PERSONS, 1957 - 67

| Year | AVERAGE NUMBERS UNEMPLOYED | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Temporarily Stopped | | | Wholly Unemployed | | | Total Register | | |
| | Males | Females | Total | Males | Females | Total | Males | Females | Total |
| 1957 | 58 | 42 | 100 | 249 | 198 | 447 | 307 | 240 | 547 |
| 1958 | 287 | 450 | 737 | 662 | 356 | 1,018 | 949 | 806 | 1,755 |
| 1959 | 182 | 206 | 388 | 713 | 359 | 1,072 | 895 | 565 | 1,460 |
| 1960 | 45 | 19 | 64 | 460 | 346 | 806 | 505 | 365 | 870 |
| 1961 | 56 | 41 | 97 | 327 | 182 | 509 | 383 | 223 | 606 |
| 1962 | 130 | 165 | 295 | 705 | 286 | 991 | 835 | 451 | 1,286 |
| 1963 | 165 | 110 | 275 | 907 | 274 | 1,181 | 1,072 | 384 | 1,456 |
| 1964 | 60 | 19 | 79 | 535 | 164 | 699 | 595 | 183 | 778 |
| 1965 | 57 | 11 | 68 | 360 | 140 | 500 | 417 | 151 | 568 |
| 1966 | 48 | 37 | 85 | 278 | 130 | 408 | 326 | 167 | 493 |
| 1967 | 138 | 55 | 194 | 611 | 178 | 789 | 749 | 234 | 982 |

APPENDIX

D4

# MONTHLY AVERAGES OF UNFILLED VACANCIES, 1957 - 1967

| Year | Average Number of Unfilled Vacancies | | |
|---|---|---|---|
| | Males | Females | Total |
| 1957 | 758 | 1,291 | 2,049 |
| 1958 | 415 | 720 | 1,135 |
| 1959 | 410 | 659 | 1,069 |
| 1960 | 721 | 985 | 1,706 |
| 1961 | 1,000 | 1,297 | 2,297 |
| 1962 | 581 | 857 | 1,438 |
| 1963 | 306 | 541 | 847 |
| 1964 | 549 | 965 | 1,514 |
| 1965 | 752 | 1,098 | 1,850 |
| 1966 | 860 | 1,060 | 1,920 |
| 1967 | 464 | 582 | 1,046 |

APPENDIX

E

# MANPOWER BUDGET FOR 1971

An explanation of the methods used in arriving at the manpower budget for 1971 (Chapter 3 paras. 75-79) is given below.

## SUPPLY OF LABOUR

There are a number of difficulties in making estimates of labour supply for future years. These are increased in the case of small areas - because of the greater potential error with small numbers; because of the difficulty of obtaining satisfactory estimates of "unlocated" workers for small areas (see Notes to Appendix D): and because of the effect on activity rates of travel to work across the area's boundaries. The study area is fortunately fairly self-contained, so that this latter difficulty is diminished. Even so there is considerable scope for error in the exercise.

Estimates have been made by applying assumed activity rates to estimates of the home population for the area in 1971. An activity rate in this context is the proportion of total employees working in the area to the home population aged 15 and over who are resident in the area. Rates have been calculated for males and females separately for a number of past years and from them estimates of rates in 1971 were made. These included an allowance for "unlocated" workers. The assumed activity rates are then applied to population estimates to give the supply of labour with and without migration in 1971.

These supply estimates include both employed and unemployed. The statistics of unemployed always include a considerable number of persons who, for one reason or another, cannot be absorbed into employment quickly and many others who are temporarily unemployed while moving from one job to another. In order to make allowance for this a level of unemployment of 1.2% for men and 0.7% for women has been deducted from these figures to give 'effective' labour supply estimates shown in Table E1.

TABLE E1: ESTIMATES OF EFFECTIVE SUPPLY OF LABOUR IN 1971; EMPLOYEES (EMPLOYED AND UNEMPLOYED)

Thousands

| 1966 | | | 1971 estimates | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | With migration | | | Without migration | | |
| Males | Females | Total | Males | Females | Total | Males | Females | Total |
| 58.0 | 39.1 | 97.1 | 56.6 to 57.2 | 36.3 to 36.6 | 92.9 to 93.8 | 60.1 | 38.6 | 98.7 |
| Deduct:- 1.2% males 0.7% females | | | - 0.7 | - 0.3 | - 1.0 | - 0.7 | - 0.3 | - 1.0 |
| Effective labour supply in 1971 | | | 55.9 to 56.5 | 36.0 to 36.3 | 91.9 to 92.8 | 59.4 | 38.3 | 97.7 |

Assuming a continuation of past migration trends the figures show a decrease in total effective labour supply varying from 4,300 to 5,200. The decrease for men varies from 1,500 to 2,100 and for women from 2,800 to 3,100. If net migration ceaeed altogether, which is most unlikely in the forecast period, the total effective supply would increase by 600, with 1,400 additional males and 800 fewer females.

DEMAND FOR LABOUR

There are no national or regional estimatee of future demand for labour which can at present be used as a backcloth for local area estimates and such estimatee must be approached with caution.

There are a number of difficulties involved in producing estimates for a comparatively small area: where numbers of employees are not large a decision by a single major employer to expand or contract may appreciably affect total demand. There is also the problem of unlocated workers for which an adjustment has to be made but which may not be accurate. Although the study area is reasonably self-contained at present, Brighouse, Elland and Halifax are close to other employment centres in West Yorkshire and the present pattern of travel to work could change if jobs became harder to find. Not all vacancies are notified to the Ministry of Labour and in an area of persistent labour shortage there may be 'hidden demand' - vacancies which do not come to light because employere know they cannot be filled. These may emerge if the labour situation becomes easier.

Estimates of demand for labour in 1971 are shown in Table E2. They have been made with reference to past trends in employment and outstanding vacancies, local knowledge of particular developments, information about jobs in prospect from induetrial developments known to the Board of Trade and replies to questions about future changee in the Induetrial Survey.

TABLE E2: ESTIMATES OF DEMAND FOR LABOUR IN 1971.
EMPLOYEES IN EMPLOYMENT

Thousands

| 1966 | | | 1971 | | | Changes 1966-71 | | |
|---|---|---|---|---|---|---|---|---|
| Males | Females | Total | Males | Females | Total | Males | Females | Total |
| 58.0 | 39.1 | 97.1 | 58.0 to 59.2 | 37.2 to 38.0 | 95.2 to 97.2 | 0 to + 1.2 | -1.9 to -1.1 | -1.9 to +0.1 |

Because of the margin of error involved a range of changes has been. forecast. The forecast suggests there will be a change in total demand of between + 100 and -1,900 jobs. The change for males varies from an increase of 1,200 to no change and for females from a decrease of 1,100 to a decrease of 1,900. The labour demand forecaste relate to employees in employment and therefore exclude the unemployed.

APPENDIX

F

# DERELICT LAND IN THE STUDY AREA

The latest of a eeries of annual returns surveying derelict land is that submitted to the Ministry of Housing and Local Government in reeponse to Circular 59 of 1966. The following figures are extracted from that return:-

| L.A. | Spoil Heaps Acres | Excavstions and Pits Acres | Other forms of dereliction Acres | Totals Acres | No treatment necessary Acres |
|---|---|---|---|---|---|
| Halifax C.B. | 4 | 158 | 79 | 241 | 88 (37%) |
| Brighouse M.B. | 10 | 21 | 6 | 37 | 15 (41%) |
| Todmorden M.B. | 26 | 36 | 4 | 66 | 36 (55%) |
| Elland U.D. | - | 24 | 17 | 41 | 13 (32%) |
| Sowerby Bridge U.D. | - | 29 | - | 29 | 29 (100%) |
| Hebden Royd U.D. | - | - | - | - | - (-) |
| Ripponden U.D. | - | 32 | 4 | 36 | 36 (100%) |
| Hepton R.D. | - | 43 | - | 43 | 43 (100%) |
| Totals | 40 | 343 | 110 | 493 | 260 (53%) |

For the purpose of this return, derelict land is defined as "land so damaged by induetrial or other development that it is an eyesore and incapable of further use without special treatments". Tips or excavations which are still in use in connection with aotive industry are excluded, however unsightly they may be.

These statietics thus represent a emall loss to the community, whether temporary or permanent, of land which might otherwise be suitable for development. They do not neceseerily measure the effeot upon the community in environmental terms. In this context, the etatistics presented in the above table should be envisaged in terms of a series of visual irritants. The irritant effect ie not fully expressed in terms of the acreage covered by an individual feature but is rather the product of the eize of the irritant multiplied by what may be termed the "impact factor". For example, a 10 acre stone quarry on Norland Moor is likely to be visible over a relatively short radius, and therefore has a much lower impact factor than a 10 acre colliery spoil heap, standing perhaps 150 feet high, and visible over a radius of 3 miles or more.

In these terms the main oonsiderations involved in environmental deterioration are the extractive industries and the large-scale waste producere, each capable of affecting substantial areas and achieving high impact factors.

Coal mining, elsewhere the major environmental intrusion, is no longer a problem in the study area. Minor scars of abandoned collieries are to be seen from the regional boundary west of Todmorden to Hartshead Moor, east of Brighouse, but the last active colliery within the study area closed a decade ago at Norwood Green, on the Bradford/Brighouse boundary. On the initiative of the then Area General Manager, the National Coal Board undertook a praiseworthy scheme of landscape rehabilitation.

Until quite recently the National Coal Board North-Western Divieion operated a small drift mine known as Hill Top Drift practically on the Todmorden/Lancashire boundary, but this is now closed except for pumping purposes.

Numerically predominant in the area is the stone quarrying industry. The Pennine Grits outcrop throughout the area, and have been used as a major source of building material for centuries. Ancient quarries occur at frequent intervals, but rarely exceed 1 or 2 acres in extent except at Norland Moor, south of Sowerby Bridge. The native rock, exposed at theee abandoned quarry facee, blends in with the rugged landscape and with the local housing created from the quarried product and there is rarely any eerious visual conflict. This is reflected in the statietical returns for Hepton R.D. and Ripponden U.D., where in neither case ie any landscape treatment thought necessary. The economic competition of brick hae reeulted in a contraction and re-deployment in the stone quarrying industries, which are now concentrated in a few large quarriee between Southowram, Hipperholme and Shibden, concentrating primarily upon reconstructed building stone and paving slabs. The effects of this concentration are somewhat mitigated by the low impact factor, although local landecape could be much improved at limited cost by a concerted action plan.

Sand and gravel is being worked in the Calder Valley from two sites, upstream and downetream from Brighouse. Both sites are large in terms of acreage, but are not included in the table as they are active quarries, and will not therefore be regarded as derelict until working is completed. Planning conditione require refilling and reetoration of both sites, one of which will be crossed by the line of the Lancashire-Yorkehire motorway (M.62) and the other by the projected Elland bypass. The problems created are therefore leee concerned with potential dereliction than with the environmental aspects of long-term extractive processes, with unsightliness in the valley bottom and noise and dirt associated with heavy quarry traffic.

The final aspect of the extractive industries is the brick and clay industry. The bottom seams of the Yorkshire coalfield outcrop to the east of Halifax, and are aesociated with high grade fireclaye used in the manufacture of pipes and moulded sanitary ware. The manufacture of bricke is a similar process, although the eimplier moulding, higher porosity, and absence of glazing calls for a clay which is much more readily available. The fireclay was extensively mined between Halifax, Elland and Brighouse, and again on the Lancashire border west of Todmorden. The mining process was similar to coal mining, and gave rise to severe subsidence problems, but unlike coal mining relatively little waste was brought to the surface.

Post-war developments in opencast mining were closely followed in the fireclay industry, and offered cheap supplies of raw material as the cost of mined fireclay increased. Several of the older firms which continued to depend upon mining went out of business, but a stage has now been reached where known sites suitable for openoast working are

approaching exhaustion. The surviving firms must look to mining to secure their future output, and consideration is already being given to new mining methods using extensive mechanisation to cut down the cost of extraction.

The fireclay works are usually built alongside the mine entrance, and unsightliness is due less to mining as such than to the usual practice of storing finished clayware in full view round the works, and the indiscriminate tipping of waste (mainly broken clayware). There is no backlog of dereliction arising from opencast fireclay workings; the sites are restored to agricultural use.

Unlike fireclay, which occurs in seams 3 or 4 ft. thick beneath the associated coal seam, brick clay can be found in geological strata 100 ft, and more in depth. This is the case on the south bank of the Calder Valley at Elland, where clay is extracted in benches at varying levels over an entire hillside. Elland occupies a natural amphitheatre, the flanks of which comprise one huge quarry face having a very high impact factor, and the method of working is such that no vegetation can be established, and no effective screening achieved. This is a result of a beneficial form of land use, and the question of dereliction as defined by Circular 59/66 does not arise, yet in environmental terms this is the worst feature of the entire study area.

Having reviewed the extractive industries, attention is now directed to the large-scale waste disposal problems. These two aspects are in a sense complementary, since the one creates the holes which the other may fill. Around large centres of population such as Leeds or Sheffield the disposal of domestic and industrial waste tends to exceed the capacity of the pits and excavations available to accommodate it, but this is not the case in the study area. Excavations and pits totalling 343 acres comprise more than 70% of the total land listed derelict, and even if many of these individual sites are better left untreated, it follows that suitable holes are available to receive filling, and where this can be achieved, two potential sources of dereliction can be so managed as to cancel each other.

The largest single waste-producer in the survey area is Elland Power Station, consuming about 2/3rds million tons of coal per annum, and disposing of well over 100,000 tons of pulverised fuel ash. This material might be regarded as a by-product rather than a waste product, and the Central Electricity Generating Board are constantly seeking to expand sales by publicising its virtues as a constructional material for the civil engineering and building industries. Output nevertheless far exceeds demand, and it is fortunate that Elland power station is in close proximity to one of the large sand and gravel quarries already referred to, so that tipping space is readily available for many years to come.

Domestic and industrial waste output centres upon the main concentrations of population in Halifax, Brighouse and Elland. The responsibility for disposal is widely dispersed among the various local authorities and individual firms, and the siting of numerous small tips has been determined more by casual factors of ownership or availability than by the suitability of the site for tipping. The result is to spread dereliction and unsightliness, where a rational approach to the problem would enable such waste to be used constructively, for the elimination of existing pockets of dereliction. It is to be hoped that in the field of domestic waste disposal local government re-organisation will encourage the establishment of larger and more effective waste disposal units, whilst in the industrial field a similar rationalisation is

already being achieved by the expansion of firms offering an industrial waste disposal service, based upon the use of large rented containers, regularly collected from factory premises by purpose-made lift and haul vehicles carrying them to tip at selected and well-managed sites.

APPENDIX

G1

# HOUSEHOLDS AND DWELLINGS, 1951, 1961 and 1966

| Area | Average size of private household (persons per household) | | | Total dwellings occupied and vacant | | | Vacant Dwellings (as percentage of total) | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1951 | 1961 | 1966 | 1951 | 1961 | 1966 | 1951 | 1961 | 1966 |
| Halifax C.B. | 2.88 | 2.74 | 2.73 | 33,526 | 34,945 | 35,020 | 2.8 | 2.9 | 4.9 |
| Brighouse M.B. | 2.85 | 2.71 | 2.66 | 10,797 | 11,560 | 12,370 | 2.4 | 2.5 | 3.2 |
| Elland U.D. | 2.84 | 2.67 | 2.70 | 6,875 | 7,016 | 7,290 | 2.3 | 3.0 | 5.1 |
| Hebden Royd U.D. | 2.69 | 2.56 | 2.59 | 3,899 | 3,801 | 3,700 | 3.3 | 3.7 | 3.5 |
| Ripponden U.D. | 2.86 | 2.76 | 2.62 | 1,799 | 1,811 | 1,870 | 3.1 | 4.0 | 1.0 |
| Sowerby Bridge U.D. | 2.83 | 2.66 | 2.68 | 6,758 | 6,809 | 6,710 | 3.0 | 5.1 | 6.1 |
| Todmorden M.B. | 2.74 | 2.58 | 2.51 | 7,063 | 6,959 | 6,710 | 3.4 | 5.2 | 6.4 |
| Hepton R.D. | 2.82 | 2.60 | 2.53 | 1,572 | 1,519 | 1,520 | 7.8 | 6.7 | 5.3 |
| Total Study Area | 2.78 | 2.69 | 2.67 | 72,289 | 74,420 | 75,190 | 2.9 | 3.4 | 4.9 |
| Yorkshire and Humberside | 3.2 | 2.9 | 2.9 | 1,368,000 | 1,538,000 | 1,606,000 | 2.3 | 2.1 | 3.0 |
| England and Wales | 3.2 | 3.0 | 2.9 | 12,389,000 | 14,646,000 | 15,449,170 | 2.5 | 2.1 | 3.0 |

APPENDIX

G2

## UNFIT DWELLINGS, 1965 (FIRST QUARTER)

| Area | Number | % of existing stock |
|---|---|---|
| Halifax C.B. | 6,396 | 18.8 |
| Brighouse M.B. | 2,426 | 20.3 |
| Elland U.D. | 1,600 | 21.9 |
| Hebden Royd U.D. | 298 | 7.8 |
| Ripponden U.D. | 16 | 0.9 |
| Sowerby Bridge U.D. | 702 | 10.5 |
| Todmorden M.B. | 1,464 | 20.7 |
| Hepton R.D. | 77 | 4.7 |
| Total Study Area | 12,979 | 17.4 |
| Yorkshire and Humberside | 137,400 | 8.7 |
| England and Wales | 823,700 | 5.5 |

APPENDIX

G3

## HOUSEHOLDS LACKING CERTAIN ARRANGEMENTS, 1966

| Area | Hot water tap | | Fixed bath | | Water closet | |
|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % |
| Halifax C.B. | 5,140 | 15.7 | 7,420 | 22.6 | 530 | 1.6 |
| Brighouse M.B. | 1,810 | 15.5 | 3,020 | 25.8 | 100 | - |
| Elland U.D. | 1,280 | 18.8 | 2,050 | 30.1 | 220 | 3.2 |
| Hebden Royd U.D. | 690 | 20.1 | 1,010 | 29.4 | 210 | 6.1 |
| Ripponden U.D. | 260 | 15.9 | 380 | 23.2 | 150 | 9.2 |
| Sowerby Bridge U.D. | 1,290 | 20.8 | 1,930 | 31.1 | 170 | 2.7 |
| Todmorden M.B. | 1,340 | 21.7 | 2,430 | 39.1 | 220 | 3.6 |
| Hepton R.D. | 240 | 17.4 | 420 | 30.4 | 280 | 20.3 |
| Total Study Area | 12,050 | 17.2 | 18,660 | 26.6 | 1,880 | 2.7 |
| Yorkshire and Humberside | 172,940 | 11.2 | 270,880 | 17.5 | 2,250 | 1.6 |
| England and Wales | 1,925,940 | 12.5 | 2,295,690 | 14.9 | 274,260 | 1.8 |

APPENDIX

G4

# RATEABLE VALUE OF DWELLINGS, APRIL 1967

| Area | Dwellings with a rateable value of:- | | | | | Total |
|---|---|---|---|---|---|---|
| | Not exceeding £30 | over £30-56 | over £56-100 | over £100-200 | over £200 | |
| Halifax C.B. | 17,525 | 13,548 | 3,173 | 409 | 27 | 34,682 |
| Brighouse M.B. | 6,151 | 4,196 | 1,841 | 260 | 14 | 12,462 |
| Elland U.D. | 4,258 | 2,150 | 555 | 67 | 1 | 7,031 |
| Hebden Royd U.D. | 2,485 | 945 | 203 | 38 | 0 | 3,671 |
| Ripponden U.D. | 1,068 | 500 | 142 | 23 | 1 | 1,734 |
| Sowerby Bridge U.D. | 4,365 | 2,070 | 228 | 39 | 2 | 6,704 |
| Todmorden M.B. | 5,027 | 1,250 | 177 | 22 | 1 | 6,477 |
| Hepton R.D. | 1,105 | 317 | 43 | 7 | 0 | 1,472 |
| Total Study Area | 41,984 | 24,976 | 6,362 | 865 | 46 | 74,233 |

APPENDIX

G5

# BACK-TO-BACK HOUSES, 1954

| Area | Number | % of Total |
|---|---|---|
| Halifax C.B. | 8,900 | 27 |
| Brighouse M.B. | 2,900 | 26 |
| Elland U.D. | 1,400 | 19 |
| Hebden Royd U.D. | 420 | 11 |
| Ripponden U.D. | 246 | 13 |
| Sowerby Bridge U.D. | 2,300 | 35 |
| Todmorden M.B. | 1,900 | 27 |
| Hepton R.D. | 152 | 9 |
| Total Study Area | 18,218 | 11.7 |

APPENDIX

G6

# PROPORTION OF HOUSING STOCK BUILT SINCE 1945

| Area | Total housing stock 1966 | No. of dwellings completed 1945-66 ('000) |
|---|---|---|
| Halifax C.B. | 35,020 | 6,703 |
| Brighouse M.B. | 12,370 | 3,107 |
| Elland U.D. | 7,290 | 1,198 |
| Hebden Royd U.D. | 3,700 | 432 |
| Ripponden U.D. | 1,870 | 232 |
| Sowerby Bridge U.D. | 6,710 | 970 |
| Todmorden M.B. | 6,710 | 499 |
| Hepton R.D. | 1,520 | 206 |
| Total Study Area | 75,190 | 13,347 |
| Yorkshire and Humberside | 1,647,000 | 492,200 |
| England and Wales | 16,643,000 | 5,131,800. |

APPENDIX

G7

# HOUSING COMPLETIONS AND DEMOLITIONS, 1961 - 66

| Area | Houses completed | | | Houses Demolished | Net additions to housing stock |
|---|---|---|---|---|---|
| | Local Authority | Private Enterprise | Total | | |
| Halifax C.B. | 1,528 | 1,190 | 2,718 | 1,652 | 1,066 |
| Brighouse M.B. | 334 | 1,171 | 1,505 | 415 | 1,090 |
| Elland U.D. | 257 | 373 | 630 | 315 | 315 |
| Hebden Royd U.D. | 86 | 61 | 147 | 227 | - 80 |
| Ripponden U.D. | 44 | 35 | 79 | 28 | 51 |
| Sowerby Bridge U.D. | 549 | 68 | 617 | 593 | 24 |
| Todmorden M.B. | 117 | 22 | 139 | 366 | - 227 |
| Hepton R.D. | 0 | 19 | 19 | 6 | 13 |
| Total Study Area | 2,915 | 2,939 | 5,854 | 3,602 | 2,252 |
| Yorkshire and Humberside | 79,893 | 104,253 | 184,146 | 65,945 | 118,201 |
| England and Wales | 438,287 | 1,030,096 | 1,468,383 | 374,920 | 1,093,463 |

APPENDIX

H

# USE OF RAILWAY BY LOCAL COMMUNITIES

Reference is made in Para. 159 to an exercise designed to assess the importance of the railway to local communities in the study area. The calculations are based on the following data:-

(a) Journeys originating from stations in the study area in 1966. This information is based on ticket issues (with appropriate allowances for season tickets) to the following stations:-

Accrington, Blackburn, Bradford, Brighouse, Castleford, Halifax, Hebden Bridge, Horbury, Huddersfield, Leeds, Littleborough, Manchester, Mirfield, Mytholmroyd, Normanton, Preston, Rochdale, Rose Grove, Sowerby Bridge, Todmorden, Wakefield and York.

These include the principal destinations within approximately 40 miles; journeys to destinations beyond this radius, e.g. London, other major cities, holiday resorts etc., are therefore not included.

(b) The 1961 population of an estimated catchment area around each station in the study area. The units used here are local authority areas broken down to ward level as necessary.

This information enabled a ratio of journeys per hundred population to be calculated. The results are given in the following table:-

| Station | Total journeys 1966 ('000) | Approximate areas served | | Journeys per hundred population |
|---|---|---|---|---|
| | | Local Authority areas | Population 1961 ('000) | |
| Brighouse | 5.8 | Brighouse M.B. (less Southowram Ward) | 27.3 | 21 |
| Halifax | 86.8 | Halifax C.B. and Southowram Ward of Brighouse M.B. | 99.7 | 87 |
| Sowerby Bridge | 25.1 | Sowerby Bridge U.D. | 17.4 | 145 |
| Mytholmroyd | 11.1 | Hebden Royd U.D. (Mytholmroyd Ward) | 4.7 | 238 |
| Hebden Bridge | 23.4 | Hebden Royd U.D. (Hebden Ward) and Hepton R.D. | 8.4 | 277 |
| Todmorden | 78.9 | Todmorden M.B. | 17.4 | 453 |



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# Halifax and Calder Valley

## An Area Study

Yorkshire and Humberside Economic Planning Council and Board

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J.W. Sterland, O.B.E., J.P., Alderman of Sheffield C.B.

A.W. Suddaby, C.B.E., Managing Director of Boston Deep Sea Fisheries Limited.

Secretary

J.A. Wallace.

# PREFACE

In A Review of Yorkshire and Humberside (paragraphs 414-5) the Yorkshire and Humberside Economic Planning Council expressed concern about the future economic strength of towns in the higher Pennine valleys and drew attention to the problems associated with relatively low population growth and serious environmental difficulties in the industrial towns of Bradford, Halifax and Huddersfield.

The circumstances of these areas represent a general problem which requires closer study. The Council selected the Halifax and Calder Valley as a first area for such a study and invited the Economic Planning Board to put this in hand.

The present report comprises the results of this work. In undertaking the study the Economic Planning Board have evolved a technique which will provide a pattern for similar studies of other areas, i.e. of Huddersfield and the Colne Valley, and Doncaster.

Part 1 of the report sets out the Council's proposals for a co-ordinated strategy for the study area. These proposals are based on Part 2 of the report which comprises the Economic Planning Board's study.

The study confirms that the area faces further economic and social decline unless co-ordinated action is taken to prevent it.

The Economic Planning Council are convinced that co-ordinated action within the framework of their proposals will arrest this decline and ensure the future well-being of the area.

The Council hope that all who read this report will find it enlightening and that their broad proposals will be generally acceptable. The Council would welcome views about the report and the proposals which are made. These views should be sent in writing to the Secretary, Yorkshire and Humberside Economic Planning Council, City House, Leeds, 1.